

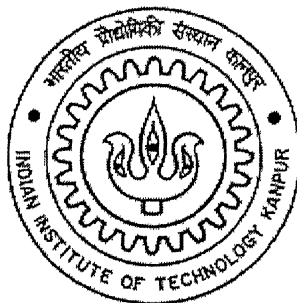
# EVALUATION OF WEB SITES ON INFORMATION AND ENTERTAINMENT PROPERTIES: THE ROLE OF INVOLVEMENT

A Thesis Submitted in  
Partial Fulfillment of the Requirements  
for the Degree of

**MASTER OF TECHNOLOGY**

By

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To the

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## CERTIFICATE

It is certified that the work contained in this thesis entitled “*Evaluation of Web Sites on Information and Entertainment Properties: The Role of Involvement*” has been carried out by **Mr. Ram Krishna** (Roll No. **9911412**) under my supervision and this work has not been submitted elsewhere for a degree.

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# **ABSTRACT**

The importance of the commerce conducted over the Internet to the global economy is no longer in doubt. Both online executives and Internet marketing academics agree that the need to develop a comprehensive understanding of consumer behaviour in commercial online environment is essential for future growth of E-commerce. Determining how to create commercial online environments that engage consumers so that important marketing objectives, such as extended visit durations, repeat visits, and online purchase objectives may be achieved, are critical marketing tasks.

In this thesis, we develop a conceptual framework for the evaluation of web site on information and entertainment profiles and apply the individual profiles to explain the differences in the involvement of the consumers. The main contribution of this line of research is to conceptualise the factors that lead a consumer to visit a web site more frequently and to illustrate how the individual varies in web site involvement can be explained and measured in terms of the different constructs. The findings reported here indicate that a good web site is one that delivers relevant and well-organised information in engaging manner. The proposed model offers simple and reliable instruments that would help delineate factors for success and failures of different web sites.

The model identifies a number of actionable determinants of web site involvement that will have direct application to design of commercial web sites. Our methodology has the potential to assist in segmentation and targeting decisions for a given web site. Understanding differences in people's behaviour will aid the development, design, and evaluation of commercial web site, online retail stores, and search engines. The consumer behaviour differences can also be compared for traditional versus electronic media.

# CHAPTER 1

## INTRODUCTION

The Internet has evolved as a dynamic new medium of information, entertainment and commerce. Over the past two years, the consumers have become increasingly Internet savvy. Penetration levels have increased dramatically and are rising continually. New businesses are being created and traditional ones are moving online. These trends have led many companies to recognize Internet as a marketing media of tremendous potential and they have started marketing their products on-line. Familiar names now selling on-line includes the GAP, Barnes & Noble, Staples, OfficeMax, and many more. The resulting business paradigm falls in the general area of electronic commerce (e-commerce), which "... describes a wide variety of electronic platforms, such as the sending of purchase orders to suppliers via electronic data interchange (EDI) . . . the use of ATM's, EFTPOS, and smart cards to facilitate payments; and the use of Internet and on-line services" (Kotler 2000).

Amidst all the excitement, one tends to lose track of probably the most significantly entity behind all this attention – the consumer. The online consumer represents an extremely attractive segment of the populace. These people are generally found to be younger, more educated and more affluent than the general population. However, winning the online consumer requires a deep analysis and understanding of his/her behaviour, – and developing the marketing strategy accordingly. The objective of this thesis is to understand the net user better by focussing on an underlying psychological construct information seeking tendency, focused attention, sensation seeking tendency, mood variability, involvement, and its utilitarian and hedonic evaluations.

### **1.1 Current Scenario in E-Commerce:**

In the late 1990s, analyst estimates of business-to-consumer electronic commerce have repeatedly revealed significant growth of electronic commerce. Forrester Research, for example, revised its initial \$4.8 billion consumer e-commerce forecast for 1998 to \$7.8 billion by the year's end (Forrester Research 1998), while the Boston Consulting Group (1998) boldly upped Forrester's estimates to \$13 billion. By the year 2000, Forrester's expects electronic commerce in the consumer sector to reach \$33 billion (Forrester Research 1998).



It is expected that the digital economy created by the Internet would accelerate world economic growth well into the new millennium (Henry et al. 1999). By the year 2003, Internet commerce conducted globally is expected to reach \$3.2 trillion, representing 5% of global transactions (Forrester Research 1998). The trends in India are in line with the sweeping changes taking place in the global markets where the Internet has emerged as the medium for conducting business. NASSCOM conducted a study on the plans and capabilities of software companies in India.

Some of the preliminary findings are as follows:

- In the year 2000-01, Internet and e-commerce related software and services exports from India are expected to bring in \$ 1200 million. This Figure is expected to rise to \$ 1800 million by 2001-02, \$ 2,300 by 2002-03 and \$ 3,000 million by 2003-04.
- Reference to Table 1.1: The total volumes of e-commerce transactions in India were about Rs. 450 crore in 1999-2000. The NASSCOM survey revealed that e-business transactions in India are expected to exceed Rs. 2,300 crore in 2000-01 and go up to a whopping Rs. 40,000 crore in 2003-04.

**Table 1.1: Growth of E-commerce (India)**

Year	Total E-commerce Transaction (in Rs. Crores)
1998-99	131
1999-00	450
2000-01*	2,300
2001-02*	7,500
2002-03*	20,000
2003-04*	40,000

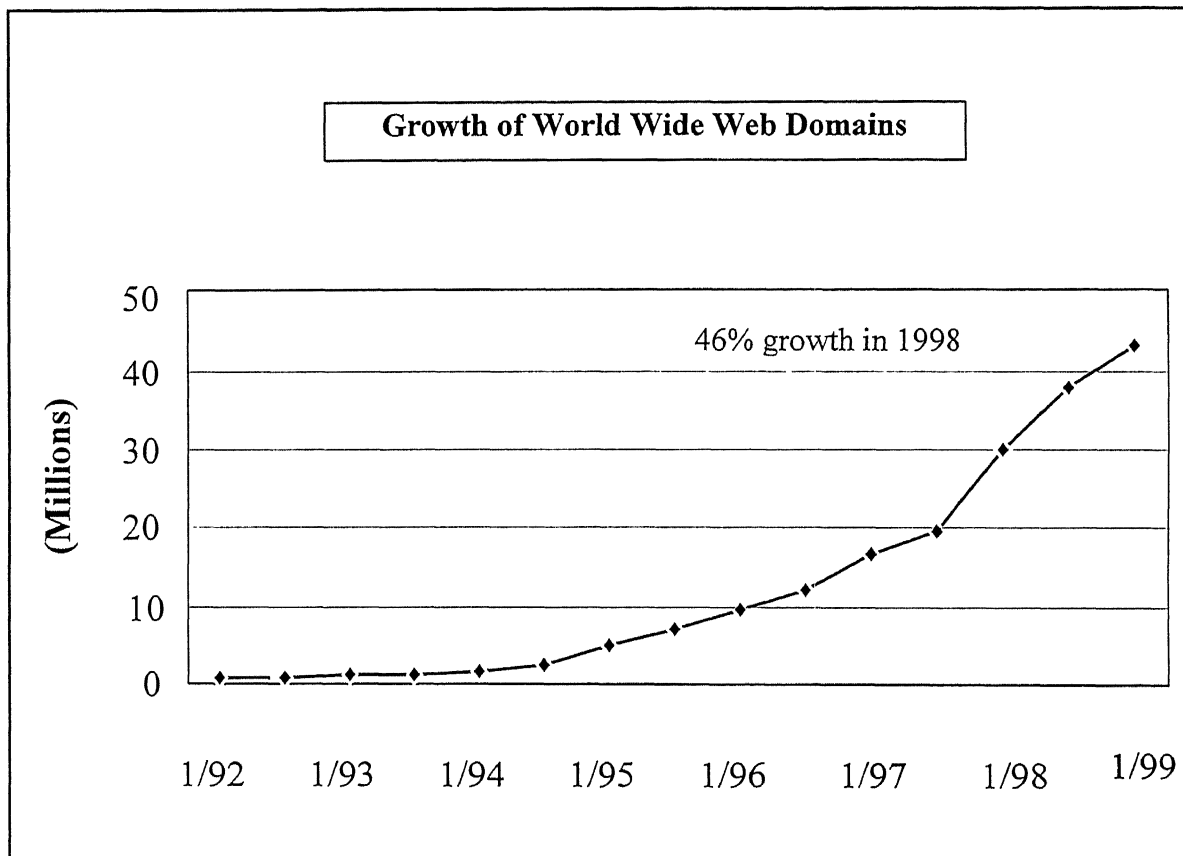
\* Projections

## **1.2 Proliferation of Internet:**

The last five years have seen phenomenally fast growth in many variables like the size of the network, users on the network, or network activity. Figure 1.1 shows the common “hockey stick” growth pattern, in this case the number of computers

connected to the Internet (Internet hosts). Between January 1994 and January 1999, Internet hosts grew from 2.2 million to over 43 million worldwide. The growth rate in 1998 was 46 percent.

The Internet user base has grown rapidly as well. Although difficult to measure precisely, the number of worldwide Internet users is estimated at over 160 million as of March 1999. Over 90 percent of these users joined the Internet in the last five years. Much more growth is possible, as this constitutes less than 4 percent of the world's adult population.



**Figure 1.1 Online Access Growth in Net Hosts**

Even in the developing countries such as India, the growth of Internet usage has shown impressive trends. A survey conducted in January 2001 by National Association of Software and Service Companies (NASSCOM) on Internet usage trends in 68 cities/towns in India has come up with some interesting findings. As per the NASSCOM survey, India's Internet subscribers have increased—from a meager base of 0.17 million subscribers in November 1998 to over 1.8 million subscribers by 31<sup>st</sup> December 2000. Meanwhile, the NASSCOM survey (accounted for over 92 percent of the total Internet users in the country) has also indicated the following:

**Table 1.2: Growth of Internet (India)**

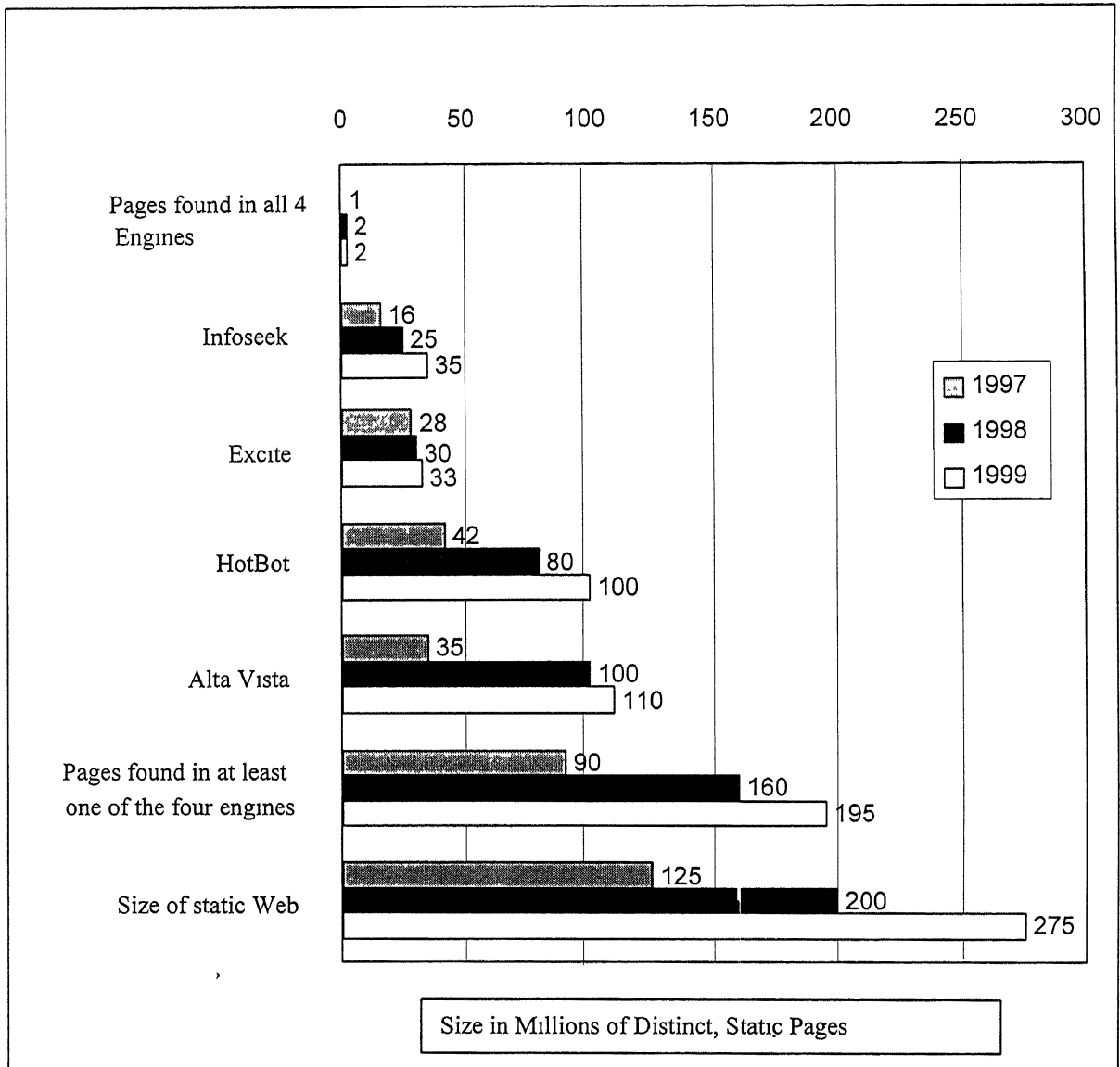
Date	Internet Connections (millions)	Users (millions)
August 15, 1995	0.002	0.01
March 31, 1996	0.05	0.25
March 31, 1997	0.09	0.45
March 31, 1998	0.14	0.70
March 31, 1999	0.28	1.40
March 31, 2000	0.77	2.80
June 30, 2000	1.04	3.70

**Table 1.3: Projected Growth of Internet (India)**

Date	Internet Connections (millions)	Users (Millions)
March 31, 2001	1.6	5
March 31, 2002	4	10
March 31, 2003	8	18

As Figure 1.2 shows, content has been growing rapidly as well. Researchers at both the Digital and NEC Research Centers measure the size of the Web in the spring of 1998 at roughly 300 million distinct Web pages. Growth rates are even higher than access and users. In the 10 months between June of 1997 and March of 1998, Web content grew 120 percent. Even more impressive than simple numbers, the types and creativity of Web content have blossomed.

Along with the rapid adoption of the Internet, users have very quickly come to depend on the Net for critical information. While almost a third of U.S. adult users have been online for less than 12 months, almost 50 percent of users now feel the Internet “is a necessity.” The number of World Wide Web (or Internet) users is increasing dramatically. In 1995, only 9.4% of US households were connected to the Web, whereas this number is projected to be 45% in 2002 (Jupiter 1997).



**Figure 1.2: Rapid Growth in Web Content**

### 1.3 The Present Study: Evaluation of Web Sites

Both online executives and Internet marketing academics agree that the need to develop a comprehensive understanding of consumer behaviour in commercial online environments is essential for future growth of E-commerce. To date, there has been a lack of genuine knowledge about what contributes to effective interactions with online consumers, although intuition and previous research (Dholakia and Bagozzi 1999; Hoffman and Novak 1996a) suggest that creating a compelling online environment for web consumers will have numerous positive consequences for commercial web providers. Indeed, Jeff Bezos, founder and CEO of Amazon.com, one of the Internet's leading online retailers, notes that creating a compelling online experience for cyber customer is the key to competitive advantage on the Internet (Weber 1999). Bezos (1999) further argues that delivering a compelling customer experience is even more important online than offline. This is because it contributes to strong word-of-mouth online – the most important driver of customer traffic to commercial Web sites (*Cognitive* 1999) – and offers an opportunity to add differential value as the web increasingly offers consumers full information about product alternatives (Haubl and Trifts 2000).

Though marketers are beginning to gain an understanding of the marketing strategies that will attract visitors to Web sites (Morr 1997; Tchong 1998), very little is known about the factors that make using the web a compelling customer experience and of the key consumer behaviour outcomes of this compelling experience. This thesis aims at developing and testing a web site evaluation based model of the online customer experience. We see this model development as an important early step on the path toward a comprehensive understanding of consumer behaviour in new media environment such as Internet.

Though some previous studies (e.g., Novak, Hoffman and Yung 2000; Chen and Wells 1999) have investigated the impact of some apparent factors, such as the Web user's personality traits and the site's properties, on Web site's effectiveness, an important question regarding how Web consumers become "involved" with a site remains largely unanswered. The investigation of involvement is important because the insights generated would help generate "sticky," or involving Web sites, a major objective of the Web marketers. In general, the study of Web site involvement will aid the development, design, and evaluation of commercial Web sites.

Involvement has been defined as “a person’s perceived relevance of the object based on inherent needs, values, and interests.” Researchers (Batra and Ahtola 1990) have found that the product involvement can be measure on two primary dimension of evaluation – utilitarian and hedonic judgement. Utilitarian performance of a product is seen as performing a useful function. Utility generates a more general form of affect (e.g., liking or disliking). Hedonic performance is valued for its intrinsically pleasing properties. Hedonic evaluation encompasses not only elements of pure pleasantness, but also fun and fantasy. Hedonic evaluation could also evoke excitement, activation, and arousal. Hence, the utilitarian evaluation relates to how much a user needs and values the product, whereas hedonic evaluation relates the products to interest and appeal to the consumer.

In the current work, we propose that a web site comprise of elements that can be classified into two broad classes: information and entertainment. In the proposed framework, we operationalise a site’s information properties by informativeness and organisation of information elements (Chen and Wells 1999) and site’s entertainment properties by entertainment properties and organisation of entertainment elements (Chen and Wells 1999).

Similar to a web site profile, we could also generate a web users’ profiles by classifying them using the two major dimensions of information and entertainment properties. In the proposed framework, we operationalise individual information type by information seeking tendency and focussed attention (Novak, Hoffman and Yung 2000) and individual entertainment type by sensation seeking tendency and mood variability (Eliashberg and Sawhney 1994).

We propose that the utilitarian evaluation of involvement is a function of individual’s information profile and hedonic evaluation is a function of individual’s entertainment profile. Both utilitarian and hedonic components of product evaluation are expected lead to more positive evaluations (Mano and Oliver 1993).

## **1.4 Thesis Organisation**

The rest of thesis is organised as following way. In Chapter 2, we review the relevant extant literature. This includes the relevant studies on consumer behaviour in product consumption experiences, attitude towards web sites and flow construct achieved on the Internet. In Chapter 3, a general consumer behavior model of web-based consumption is described. Four classes of visitors are considered to describe a web-based consumption. The conceptual frameworks for each type of visitor's class have been developed. In Chapter 4, the proposed model that was finally tested has been described, and the corresponding hypotheses have been developed. Construct definitions are also provided in Chapter 4. In Chapter 5, the research plan for testing the hypotheses is discussed. In Chapter 6, we discuss the data collection procedure. In Chapter 7, we discuss the results of testing of hypotheses and corresponding analysis. Chapter 8 provides the managerial implications of the research study. In Chapter 9, we conclude with a discussion on limitation of our study and suggest directions for future research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Research on Dimensions of Product-Elicited Evaluation (Mano and Oliver 1993)**

Until recently, the product evaluation literature had typically not distinguished dimensions of evaluative content. Generally, the well-known structure of expectancy-value models, such as that of Ajzen and Fishbein (1980), distinguishes only between normative (i.e., interpersonal) and cognitive structure segment. While the cognitive structure segment of this model has been decomposed into benefits, problems, and neutral features (Oliver and Bearden 1985), different dimensions of performance have not been detailed in this stream of research.

##### **2.1.1 Utilitarian and Hedonic Dimensions**

More recently, however, researchers have focused on two major dimensions of product relevance. The first is the traditional notion of utilitarian or instrumental performance whereby the product is seen as performing a useful function. The second dimension is that of hedonic or aesthetic performance (Hirschman and Holbrook 1982) whereby products are valued for their intrinsically pleasing properties. This two-dimensional approach is frequently typified as one of thinking versus feeling. Recently, Batra and Ahtola (1990) proposed an operational approach to product evaluation based on the utilitarian and hedonic view. These authors identify a number of bipolar semantic differential descriptors that show promise in assessing the utilitarian and hedonic components of a product.

##### **2.1.2 Involvement**

Another conceptualization of product relevance is that of involvement (Mittal and Lee 1989; Zaichkowsky 1985) which reflects the inherent need fulfillment, value expression, or interest the consumer has in the product. Involvement's influence on consumption experiences is best illustrated by the psychological consequences evoked by a product's heightened relevance to the consumer. These consequences are known to include higher motivation (Bloch, Sherrell, and Ridgway 1986; Burnkrant and Sawyer 1983), heightened arousal (Mitchell 1980), and increases in cognitive elaborations (Petty, Cacioppo, and Schumann 1983; Wright 1973). Moreover, interactions among these processes are not uncommon, as for example, when greater



processing results from higher motivation. Thus, in terms of relevance, value, interest, or need, involvement is a major element in defining and assessing dimensions of product evaluation.

The consumer's level of involvement or response to products, advertising, and purchase decisions is influenced by three factors: (Bloch and Richins 1983; Houston and Rothschild 1978).

- Personal: inherent interests, values or needs that motivates on towards the object.
- Physical: characteristics of the object that causes differentiation and increase interest.
- Situational: something that temporarily increases relevance or interest towards the object.

In Houston and Rothschild's (1978) framework, different situations and people are two factors that lead to various levels of involvement. Houston and Rothschild integrate physical characteristics of the product as part of the situational factor. Coinciding with Bloch and Richins (1983), the present article separates the physical from the situational and allows the same physical object to be subject to different levels of involvement given different situations.

## **2.2 Research on Affect in Product-Elicited Contexts (Mano and Oliver 1993)**

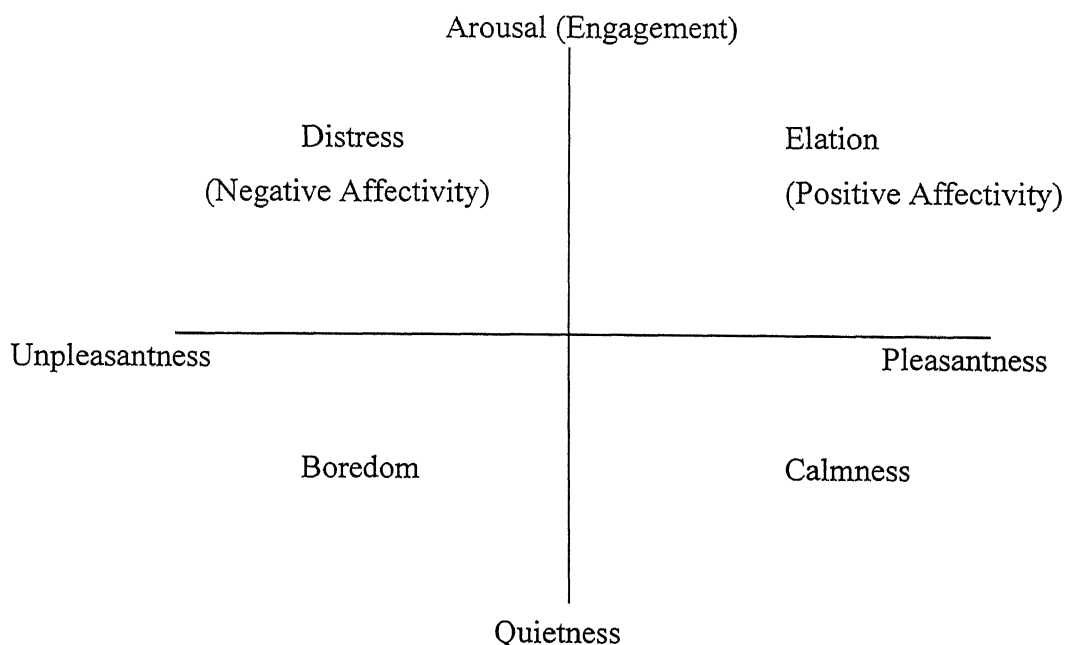
Affect has two primary dimensions pleasantness-unpleasantness and arousal-quietness. Positive affect (e.g., elation) is positioned at 45 degree between pleasantness and arousal whereas negative affect (e.g., distress) is positioned at 45 degree between unpleasantness and arousal.

Research on consumer satisfaction has primarily examined cognitive variables such as expectations or disconfirmation. However, satisfaction may not be a solely cognitive phenomenon. Rather, satisfaction is likely to comprise an element of affect or feeling. Thus, consumer satisfaction should be influenced by other general states of affect concurrently experienced by the individual. The presence of positive or negative affect, unrelated to the product itself, may well influence the affect evoked by the evaluative process inherent in satisfaction formulation. For example, satisfaction with the consumption experience might be associated with happy or sad events.

### 2.2.1 Affect as a Two-dimensional Construct

To date, a large body of theory and evidence is available to suggest that emotions can be described in terms of two primary dimensions that define a circular configuration, shown in Figure 2.1, which is commonly referred to as a circumplex. On the basis of several analyses of different samples, Russell (1979, 1980, 1991) has suggested that pleasantness-unpleasantness and arousal-quietness are affect's two primary dimensions. Moreover, he has provided evidence for various aspects of emotional labeling, the first of which is that affective space tends to be two-dimensional because of the correlation relationships among the various emotions.

In a conceptually similar interpretation, Watson and Tellegen (1985) suggest positive and negative affectivity (Figure 2.1) as the two primary independent dimensions of the circumplex, resulting from a 45 degree rotation of the pleasantness-arousal space. Positively correlated with these two axes is engagement (i.e., arousal), so that strongly engaged positive affectivity (e.g., elation), negative affectivity (e.g., distress), and neutral affect (e.g., surprise) are all likely affective outcomes. The same would be true of low arousal affect (e.g., sleepiness, relaxation, and quietness). This rotation of the primary axes does not change the configuration of the affects. Thus, pleasure is moderately aroused positive affect while displeasure is moderately aroused negative affect. The locations of the two pleasure extremes on the circumplex are such that pleasure and displeasure are negatively correlated whereas positive and negative affectivity is orthogonal.



**Figure 2.1: The Affect Circumplex**

### **2.2.2 Affective responses to Consumption-related Experiences**

Although Russell (1980) and Watson and Tellegen (1985) studies do not address product consumption per se, studies that examined emotional responses to television ads suggest that the two dimensional view of affect shows promise for assessing the underlying structure of emotions invoked by these ads (e.g., Holbrook and Batra 1987; Mano 1991; Olney, Holbrook, and Batra 1991). Moreover, recent theory and evidence has supported the appropriateness of the two-dimensional view of affect as the basis of product-consumption-elicited experiences (Oliver 1992; Westbrook 1987)<sup>1</sup>.

The fact that, when examining product-elicited affect, past research has overemphasized negative feeling and has not considered a more detailed and balanced description of affect's two dimensions may hinder a better theoretical understanding of the cognitive and affective processes mediating affect's influence on consumption experiences. In particular, an important consequence of the two-dimensional view is the need to draw attention to how both primary dimensions can influence the postconsumption experience.

### **2.3 Research on Evaluation, Affect, and Satisfaction Within the Postconsumption Response (Mano and Oliver 1993)**

Cohen and Areni (1991) have recently distinguished between attitude and affect by viewing attitudes as evaluative judgements and affect as a valenced feeling state. This distinction is important for discerning the concept of satisfaction since product satisfaction is best characterized as an attitude-like postconsumption evaluation judgement (Hunt 1977) with the evaluative aspect of that judgement varying along the hedonic (pleasantness) continuum (Oliver 1989; Westbrook and Oliver 1991). That is, both product-evoked evaluations and emotions are presumed to be significant and concurrent components in the formation of satisfaction responses.

#### **2.3.1 Affect and Satisfaction**

The notion that satisfaction is, at least in part, an affective experience is, perhaps, best illustrated by two seemingly disparate manifestations: one's personal introspection and the fact that the adjective "satisfied" is found in studies that assess pleasantness or other positive emotions (Oliver 1989). However, despite satisfaction's

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<sup>1</sup> In yet a third study, Havlena and Holbrook (1986) analyzed a framework incorporating a third "dominance" dimension, which we do not test. If this dimension is excluded from their analysis, the two-dimensional solution appears.

apparent affective nature, only recently have satisfaction researchers more carefully addressed this construct's emotional facets in general and its interrelationships with more specific affects in particular.

In a theoretical treatment, Oliver (1989) suggested a framework that stresses the role of both generalized affect ("good for me, bad for me") and specific affects resulting from disconfirmation-included attribution judgements. In this framework, which also includes arousal, the generalized affect path is parallel to the cognitive (disconfirmation) sequence; both are posited to influence satisfaction simultaneously. Thus, affect is clearly antecedent to, and necessary for, satisfaction. Yi (1990) made a similar distinction, arguing, as did Hunt (1977), that satisfaction result from processing (i.e., evaluation) the affect in a consumption experience.

In an empirical approach, Westbrook (1987), using Izard's (1977) scales, offered direct support that positive and negative affect underlies product satisfaction elicited in consumption. Westbrook and Oliver (1991) later provided a revealing analysis of satisfaction as correlated with more complex affective experiences in automobile ownership. Their findings, also using Izard's scales, point to three suggested emotional dimensions basic to the satisfaction response. These are hostility (generalized negative affect), pleasant surprise, and interest, all of which correlated in multivariate mode with satisfaction.

## **2.4 Research on Attitude Towards the Site (Chen and Wells 1999)**

Although some marketers initially regarded the Internet as quite measurable, many soon realized that "web surfers are getting harder to measure" (Taylor 1997). They came to understand, for instance, that the once popular clickthroughs approach might well be distorted by online robots that imitate human surfers. In response to these technical limitations (Chen 1996), some academic researchers focused on counting reach and frequency (Leckenby and Hong 1998). This development increased the need to find a way to assess individual web site effectiveness.

Attitude toward the Advertisement (AAD) is widely used to studies of traditional mass media advertising. As e-commerce becomes more important, Attitude toward the Site (AST) will gain parallel status in evaluating effectiveness. The most obvious parallel to evaluating web advertising is evaluating traditional mass media advertising. Although researchers have devoted much attention to this topic, no single

system is preeminent. However, the approach-measuring Attitude toward the Advertisement (AAD) – has proved useful in applied and academic settings (Shimp 1981; MacKenzie, Lutz and Belch 1986; Baker and Lutz 1988; Brown and Stayman 1992). Therefore, it seems that as the Internet becomes more important, Attitude toward the Site (AST) has become useful for similar purposes.

Academic and applied researchers have also found that a single measure of Attitude toward the Advertisement does not convey all the information in consumer's ratings of advertisements (Schlinger 1979; Pashupati 1994). It therefore seems likely that dimensions that correlate with Attitude toward the Site will yield insights into surfers' reactions.

Previous researches on Attitude toward the Advertisement (AAD) – a “predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure situation” (MacKenzie, Lutz and Belch 1986) – has shown that AAD is an indicator of advertising effectiveness. In a well-known study sponsored by the Advertising Research Foundation, Haley and Baldinger (1991) found that how well viewers liked an Advertisement was the best single predictor of sales effects. Aaker and Stayman (1990) found that AAD, was the best single effectiveness index. Shimp (1981), Batra and Ray (1986), and MacKenzie, Lutz, and Belch (1986) found that AAD, influences brand attitudes and purchase intentions. Brown and Stayman (1992) provide an integrated review of this evidence. By analogy, Attitude toward the Site (AST) will be an equally useful indicator of site value.

The authors (Chen and Wells 1999) had developed an Internet – specific evaluative scale that can be used by any set of raters. While their scale resembles other evaluative scales, it has its own Internet specific flavour. They also derived a set of dimensions that can give more detail on how well a web site is doing. Taken together, these scales complement each other and offer some clues on how to improve web site design and presentation.

The attitude towards the Site (AST) scale and associated profile scale offer simple and reliable instruments that calibrate success and single out important failures.

### 2.4.1 Informativeness and Entertainment Properties

In previous work on consumers' evaluations of television commercials and print advertisements, two factors – entertaining/amusing and informative/relevant – always seemed to emerge. Web site-flavored versions of two factors reemerged as dominant factors in users' evaluations. This finding supports Krauss's (1998) prediction that the future of Internet advertising will look a lot like today's television advertising since, fundamentally, advertising is about controlled message delivery and persuasion. The dimensions found here reflect consumers' main requests in net surfing.

The *entertainment* factor was best defined by six adjectives: fun, exciting, cool, imaginative, entertaining, and flashy. These terms are similar but not identical to terms that loaded high on an “entertaining” dimension often found in rater's evaluations of TV commercials, e.g., merry, amusing (Wells, Leavitt and McConville 1971); “lots of fun to watch,” “clever and quite entertaining” (Schlinger 1979); and fast, held attention, and interesting (Moldovan 1984).

The *informativeness* factor is best defined by informative, intelligent, knowledgeable, resourceful, useful, and helpful. This factor resembles the Informative/Relevant scales that have emerged in previous studies of print advertisements and TV commercials.

Organization is operationalized by four adjectives (not) messy, (not) cumbersome, (not) confusing, and (not) irritating. Similar factors were discovered in some (but not all) previous attempts to locate the basic dimensions of mass media advertisements. Schlinger (1979) found a dimension she called “confusion” defined by the terms “distracting,” “hard to follow,” and “too complex.” Aaker and Stayman (1990) found a similar factor that had only one high loading “confusing”.

The *organization* factor gauges how well a web site presents itself and tour guides its users. A low score on *organization* suggests that the web site does a poor job of leading surfers to their destination. Examination of low-scoring web sites indicates that a poor *organization* score can be caused by too many links, too many layers, too many animations, or too bright colors.

Successful auction sites blur the distinction between commerce and fun. One measure of any site's ability to capture user attention is visit duration, the length of time users spend on a site during a visit. EBay believes it is the “stickiest” site among

the top e-commerce sites.<sup>2</sup> In December 1998, the average eBay user spent 27 minutes on the site every time he or she visited.<sup>3</sup> In addition to tracking the auctions where they were bidding, eBay users spent time chatting with other bidders, checking out other possible bids, and reading about collectibles.

## **2.5 Research on Hedonic Consumption Experiences (Eliashberg and Sawhney 1994)**

The importance of studying the role of affect, feelings, and emotions in consumer behaviour motivated Holbrook and Hirschman 1982 to propose a contrasting experiential perspective emphasizing the study of consumption phenomena, and the hedonic responses of consumers during consumption and usage experiences. The experiential perspective derives its origins from the literature on symbolic consumer behaviour (Levy 1959) and experimental esthetics (Berlyne 1971, 1974). In the experiential view, the primary focus of attention is the consumption experience. Further, in the experiential view, consumption is visualized as a subjective state with a variety of hedonic and symbolic meanings, rather than simply being the outcome of a problem solving process. The experiential view emphasizes consumption situations that consumers engage in for fun, enjoyment and leisure. Thus, it is particularly suited to studying the consumption of experiential products such as movies, music, concerts, amusement parks, novels, and the performing arts.

Although the experiential view of consumer behaviour is an important conceptual advance, some difficult conceptual and methodological challenges still exists for operationalizing the experiential framework to describe and predict the dynamics of hedonic consumption experiences. For instances, Hirschman and Holbrook (1982) propose that individual difference factors such as the sensation seeking tendency (Zuckerman 1979) may be useful for predicting consumer response to hedonic experiences. These individual difference variables are static measures of cross-sectional variations in personality characteristics. Hirschman and Holbrook (1982) concede that the experiential view needs to be extended conceptually to

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<sup>2</sup> Dow Jones Online News (1999). "Online Auctioneer eBay Claims to have 'Stickiest' e-Commerce Site," February, 23.

<sup>3</sup> George Anders and Thomas Weber (1999). "Online. Latest Chat Topic at AOL: Links with eBay," *The Wall Street Journal*, February 17.

develop measures of emotional responses during a consumption experience, and to relate these emotional responses to the enjoyment of the consumption experience.

Hirschman and Holbrook (1982) note that the capacity and desire for spending imaginal-emotional resources varies within one consumer to another consumer, based on factors such as the moods of consumers. The experiential view should be extended to account for these variations in moods and emotional states.

### **2.5.1 Sensation Seeking Tendency**

An individual's preference for total emotional stimulation is the individual difference variable that is considered as a determinant of the individual's enjoyment of hedonic consumption experiences. The desire for emotional stimulation is a personality construct that has been variously labeled as the Sensation Seeking Tendency (Zuckerman 1979), the Arousal Seeking Tendency (Russell and Mehrabian 1974), or the Optimal Stimulation Level (Raju 1980). The Sensation Seeking Tendency captures the general propensity of individuals to seek and enjoy emotional stimulation. Some individuals characteristically prefer calm settings, while others prefer high stimulation by engaging in novel and more emotionally stimulating activities. Individuals who desire a greater degree of emotional stimulation are in general expected to enjoy more emotionally stimulating activities, and an individual's enjoyment of hedonic consumption experiences will be determined, in part, by the match between the degree of emotional stimulation provided by the experience, and the degree of stimulation sought by the individual.

The Sensation Seeking construct has its roots in the concept of optimal arousal introduced by Wundt (1893). He proposed that there is an inverted – U shaped relationship between the intensity of a stimulus and the intensity of affective response to the stimulus, a relationship that is called the Wundt curve. The Wundt curve was reinterpreted by Berlyne (1971, 1974), who proposed that individuals engage in exploratory behavior aimed at attaining an optimum stimulation level. The optimal arousal level was interpreted as a personality trait by Zuckerman et al. (1964), who developed the Sensation Seeking construct, and operationalized the construct in the form of the Sensation Seeking Scale (SSS). The SSS has 40 items, and measures four independent dimensions of sensation seeking: Thrill and Adventure Seeking, Experience Seeking, Disinhibition, and Boredom and Susceptibility.

The SSS has been tested extensively in the personality literature and found to have good reliability as well as convergent validity with similar personality scales



(see Zuckerman 1979 for details). The SSS can be used to discriminate among individuals in terms of their Sensation Seeking Tendency (S. S. Type). S.S. Type has been correlated with several demographic and psychographic variables, which makes it actionable for segmentation purposes. Individuals belonging to high S.S. Type tend to engage in more exploratory behavior and variety seeking; and tend to be more willing to evaluate, try, and adopt innovative products (Raju 1980; Mittelstaedt, Grossbart, Curtis and Devere 1976). They tend to be more intelligent and better-educated (Kish and Busse 1968), take up occupations that require flexibility and an interest in change, and tend to be nontraditional and liberal in their views (Kish and Donnenwerth 1969).

### 2.5.2 Mood Variability or Moodiness Parameter

Another individual difference variable is the frequency with which individuals tend to undergo mood changes. The initial moods of an individual determine the tendency of the individual to seek arousal or pleasure at the very outset of the experience. The duration of a mood may be as small as a minute, or as long as day (Zuckerman 1979). This susceptibility to undergo mood transitions during a hedonic consumption experience is referred to as the *moodiness* of the individual.

The moodiness parameters are consistent with trait theories of mood variability. Underwood and Froming (1980) propose that a trait measure of moods require moods to be conceptualized along three dimensions:

- The average *level* of an individual's mood on the happy-sad continuum,
- The *intensity* with which a person reacts to any mood experience,
- The *frequency* of mood transitions.

Underwood and Froming (1980) note that "certain individuals report several mood experiences each day so that their moods are continually changing. In contrast, other people have mood shifts only now and again" (p. 405). They propose a construct that measures long-term variability in moods across individuals, and call it the *reactivity* construct. Reactivity describes the average intensity and frequency with which an individual tends to undergo mood changes in the long run.

The moodiness parameters are also related to the theories of human temperaments (Buss and Plomin 1975). Theories of temperament study the dynamic characteristics of human responses to emotional stimulation, and include

characteristics of responses systems such as the rise and recovery times. Rothbart and Derryberry (1981) define temperament as “the individual differences in reactivity and self-regulation, where reactivity refers to the excitability, responsivity, or arousability of the individual” (p. 40). Thus, the moodiness parameters can also be interpreted as measures of variability in human temperament.

Larsen, Diener and Emmons (1986) found no significant correlation between the Affect Intensity measure (a measure of mood variability and intensity) and any of the subscales or the total score on the SSS. They conclude that the general tendency to seek out stimulating life situations seems to be unrelated to individual differences in mood variability or intensity.

The moodiness construct has been traditionally viewed as a unidirectional construct, with no distinction being made between mood transactions from “high” to “low” or transactions from “low” to “high” levels of mood. This seems to be an oversimplification, as there is no reason to assume that the average time spent in the “high” level of a mood dimension (such as Arousal) is the same as the average time spent in the “low” level of the mood dimension (such as Relaxation). Thus, the *decay* time of a mood (which determines the average time spent in the “high” level) may be different from the *rise* time (which determines the average time spent in the “low” level). This concern possibly motivated Rothbart and Derryberry (1981) to state that “we are holding open the possibility that the rising and falling aspects (of mood variability) are functionally independent, which would generate four types of responses: slow rise-slow recovery; slow rise-fast recovery; fast rise-fast recovery and fast rise-slow recovery” (p.49).

Keeping this possibility in mind, the authors (Eliashberg and Sawhney 1994) allow for two separate parameters to capture the rise time and recovery time of mood transitions. Further, they allow for the possibility that different sets of parameters will be needed for the Pleasure and Arousal dimensions of mood transitions. They operationalize the moodiness construct in terms of four parameters, which measure the rise and recovery times for the Arousal and Pleasure dimensions of mood.

### **2.5.3 Emotional Content of Hedonic Experiences**

The emotional content of the hedonic consumption experience itself is important factor that determines the individual’s enjoyment of hedonic consumption experiences. Hedonic consumption experience are analyzed in terms of their “emotional content” on the principal dimensions of human emotions. The description

of hedonic consumption experiences on the major dimensions of emotion closely parallels the concept of perceived product position in the product attributes space that is discussed extensively in the consumer choice literature (Lilien, Kotler and Moorthy 1992). The major difference between the traditional static notion of product positioning and emotional content, however, is the dynamic nature of the emotional content. The emotional content of a hedonic consumption experience varies from moment to moment during the experience.

The emotional content of the experience is described on two independent dimensions of human emotion: Arousal and Pleasure. These two dimensions of emotion have proved to be parsimonious descriptors of the structure of many human emotional experiences (Shapiro and Biggers 1987, Russel 1989).

## **2.6 Research on the Flow Construct (Novak, Hoffman and Yung 2000)**

Hoffman and Novak (1996) recently proposed that creating a commercially compelling web site depends on facilitating a state of flow (Csikszentmihalyi 1977) for its consumers, and suggest that an important objective for online marketers is to provide for these “flow opportunities” (Hoffman and Novak 1996, p. 66). Previous researchers (e.g., Csikszentmihalyi 1990; Ghani et al. 1991; Trevino and Webster 1992; Webster et al. 1993) have noted that flow is a useful construct for describing more general human-computer interactions.

Hoffman and Novak (1996a) provided, but did not empirically test, a conceptual model of flow that detailed its antecedents and consequences. The construct is important to online marketers because it underlies what makes for a compelling online experience (Dholaki and Bagozzi 1999, Hoffman and Novak 1996a). Theoretically, conceptualizing and modeling consumers’ perceptions of flow on the web can expand scholars’ knowledge of interactive consumer behaviour in this emerging discipline. As such, it has implications for commercial web site design, online advertising, marketing strategies

### **2.6.1 Flow**

Consumers respond enthusiastically when there is an effective balance between the difficulty of using the web and its rewards. One of the experiences that many new users report with amazement is the ability to get lost in their activity and suddenly discover that an hour or two has passed. Of course, some view this as lost

work and productivity. But from the user's point of view, it has been an enjoyable and stimulating activity.

Csikszentmihalyi has called this the state of flow, which represents the "process of optimal experience." Hoffman and Novak feel this is an important aspect of online activity. Hoffman and Novak extended the idea to encompass consumer navigation behaviour in online environments such as the World Wide Web, and they defined flow as the state occurring during network navigation which is:

- Characterised by a seamless sequence of responses facilitated by machine interactivity,
- Intrinsically enjoyable,
- Accompanied by a loss of self-consciousness, and
- Self-reinforcing.

To experience flow while engaged in an online pursuit, consumers must perceive a balance between their skills and the challenges of interaction, and both their skills and challenges must be above a critical threshold.

Consumers who achieve flow on the web are so acutely involved in the act of online navigation that thoughts and perceptions not relevant to navigation are screened out, and the consumer focuses entirely on the interaction. Concentration on the navigation experience is so intense that there is little attention left to consider anything else, and consequently, other events occurring in the consumer's surrounding physical environment lose significance. Self-consciousness disappears, the consumer's sense of time becomes distorted, and the state of mind arising as a result of achieving flow on the web is extremely gratifying.

Hoffman and Novak's conceptual model of online customer experience owes an important debt to previous models of flow conceptualized in the context of human-computer interaction but is unique in several important ways. First, it has been specifically formulated to represent the general customer experience in interactive online environments, with special attention to the commercial web environment. Second, it provides more rigorous operational definitions of key model constructs than existed previously and establishes reliability and validity in a comprehensive measurement framework. Finally, unlike prior models of flow, this new model specifies an explicit structure for direct and indirect influences on the flow and provides a mechanism for determining whether and how model constructs relate to

external marketing variables such as product information search and online shopping behaviours that are relevant to the commercial online environment. These advances have been achieved by carefully conceptualization existing constructs in terms of web use and introducing new constructs uniquely related to the consumer's web usage experience.

Achieving flow can be very important for recreational users of the Web. Digital environments will never be entirely persuasive and "real" if a consumer constantly has to figure out the mechanics of navigation and choice within the virtual world. There needs to be a delicate balance between capability and challenge. Too much capability leads to boredom, and too much challenge leads to frustration. This type of design problem is very common in videogames and other forms of online immersion.

Flow may also be connected to the effectiveness of an ad-supported medium. One of the leading theories of ad effectiveness on television stresses the passive and uncritical state of mind that television induces in many viewers.<sup>4</sup> While the state of flow can be quite entertaining, it can also include a suspension of active critical thinking. This may make the Web user in a flow state more susceptible to these same forms of ad campaigns. Flow can also be influential in increasing the duration of visits to a site or digital environment. This further reinforces the ad-based model, as it gives more time to the advertiser to include advertisements.

The importance of flow to the productivity uses of the Web is less certain. Interface designers have stressed a more limited version of flow. Human-computer interfaces should attempt to make the user a "perpetual intermediate."<sup>5</sup> This implies that as skill and learning takes place, more difficult tasks and challenges should be possible. This is very similar to the balance of skill and challenge of the flow literature. Hoffman and Novak note that task-oriented activities are less likely to lead to flow, and that flow may actually interface with the successful completion of the tasks.

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<sup>4</sup> Roxanne Hovland and Gary Wilcox (1990). *Advertising in Society*, NTC Business Books, Lincolnwood.

<sup>5</sup> Alan Cooper (1995). *About Face: The essentials of User Interface Design*, IDG Books Worldwide.

## **CHAPTER 3**

### **CONCEPTUAL FRAMEWORK**

Researchers of consumer behaviour have historically developed a number of complex theories in the attempt to explain and predict the behaviour of the consumer (e.g., Bettman 1979; Engle, Kollat, and Blackwell 1978; Howard and Sheth 1969). These theories propose that consumers actively search for and use information to make informed choices. They assume that the consumer is an intelligent, rational, thinking, and problem-solving organism, who stores and evaluates sensory input to make a reasoned decision (Markin and Narayana 1975).

Involvement may be defined as “a person’s perceived relevance of the object based on inherent needs, values, and interests.” Product involvement refers to the amount of interest or attention a consumer directs towards a product (Cohen, 1983; Mitchell, 1979). The literature suggests that a person can be involved with advertisements (Krugman 1962, 1965, 1967, 1977), with products (Howard and Sheth 1969; Hupfer and Gardner 1971), or with purchase decisions (Clarke and Belk 1978). Involvement with these different objects leads to different responses. Each area might have its own idiosyncratic result of the state of being involved with the object.

#### **3.1 A General Consumer Behaviour Model of Web-Based Consumption**

A visit on a web site can be divided into four broad classes:

1. A person visits a site for ordering a customer durable product (e.g., a computer or a printer).
2. A person visits a site of a service-providing firm (e.g., travel agent or online coaching classes) for some services (e.g., booking of an air ticket from New Delhi to New York City or online tests, respectively).
3. A person visits a particular Web site for some specific information that s/he needs (e.g., news or movies reviews of current week.) following some referrals/search engines.
4. A person is idly surfing/browsing, following a link, going with the flow and comes across a Web site that s/he finds interesting.

## 3.2 Conceptual Model for Visitor Classes 1 and 2

### 3.2.1 High Involvement Visitors

The consumer behavior model for classes (1) and (2) can be expressed on the lines of the classical five stages of consumer behaviour (Kotler 1999). Here the consumer comes to a site with a predefined objective. So s/he goes through all the five stages. The visitor passes through five stages (1) Need Arousal, (2) Information Search, (3) Evaluation of Alternatives, (4) Visit Decision/Purchase Decision and (5) Postpurchase Behaviour. Clearly the buying process starts long before the actual purchase and has consequences long afterward.

This model, presented in Figure 3.1, is for high involvement visitors/consumers. The model implies that visitors/consumers pass sequentially through all five stages in buying a product. This is not always the case. In case of low involvement, he/she may skip or reverse some stages. A woman buying her regular brand of toothpaste goes directly from the need of toothpaste to the purchase decision, skipping information search and evaluation. However, we use the model shown in Figure 3.1 because it captures the full range of considerations that arise when a consumer faces a highly involving new purchase.

#### Stage 1: Need Arousal or Problem Recognition

The first stage is *need arousal*. This need may be utilitarian and/or hedonic. Communication, information gathering or ordering for goods may be the utilitarian needs. Entertainment or self-indulging may be the hedonic needs. The buying process starts when the buyer recognizes a problem or need. The need can be triggered by internal or external stimuli. In the former case, one of the person's normal needs – hunger, thirst, sex – rises to a threshold level and becomes a drive. In the latter case, a need is aroused by an external stimulus. A person passes a bakery and sees freshly baked bread that stimulates her hunger; she admires a neighbour's new car; or she watches a television advertisement for a vacation.

Marketers need to identify the circumstances that trigger a particular need. By gathering information from a number of consumers, marketers can identify the most frequent stimuli that spark an interest in a product category. They can then develop marketing strategies that trigger consumer interest.

#### Stage 2: Information Search

The second stage is *information search*. The sources of information include advertisements - electronics as well as other modes, explicit links, random and

motivated search and word of mouth. Information search is greatly affected by search cost. Web based technologies have their greatest impact in the second and third stages of the above purchase cycle.

An aroused consumer will be inclined to search for more information. We can distinguish between two levels of arousal. The milder search state is called *heightened attention*. At this level a person simply becomes more receptive to information about a product.

At the next level, the person may enter *active information search*: looking for reading material, phoning friends, and visiting stores to learn about the product. Of key interest to marketer are the major information sources to which the consumer will turn and the relative influence each will have on the subsequent purchase decision. Consumer information sources fall into four groups:

1. Personal sources: Family, friends, neighbours, acquaintances
2. Commercial sources: Advertising, Salespersons, dealers, packaging, displays
3. Public sources: Mass media, consumer-rating organizations
4. Experiential sources: Handling, examining, using the product

The relative amount and influence of these information sources vary with the product category and the buyer's characteristics.

### **Stage 3: Evaluation of alternatives**

The next stage is *evaluation of alternatives*. There is no single evaluation process used by all consumers or by one consumer in all buying situations. There are several decision evaluation processes, the most current models of which see the process as cognitively oriented. That is, they see the consumer as forming judgments largely on a conscious-and rational basis.

Some basic concepts help understanding consumer evaluation processes: First, the consumer is trying to satisfy a *need*. Second, the consumer is looking for certain *benefits* from the product solution. Third, the consumer sees each product as a *bundle of attributes* with varying abilities of delivering the benefits sought to satisfy this need.

The visitor evaluates alternatives depending upon utilitarian and hedonic factors. In both utilitarian and hedonic modes of evaluations, there are site-specific factors and individual specific factors. Consumers vary as to which product attributes they see as most relevant and the importance they attach to each attributes. They will



pay the most attention to attributes that deliver the sought benefits. The market for a product can often be segmented according to attributes that are salient to different consumer groups.

#### **Stage 4: Purchase Decision**

The next stage is *purchase decision* (in case of the web, this is web-site visit decision). In this case, the consumer visits the most suitable alternative and places the order or intent to place the order. In the evaluation stage, the consumer forms preferences among the alternatives in the choice set. The consumer may also form an intention to buy the most preferred alternative. However two factors can intervene between the purchase intention and the purchase decision.

The first factor is the *attitudes of others*. The extent to which another person's attitude reduces one's preferred alternative depends on two things: (1) the intensity of other person's negative attitude towards the consumer's preferred alternative and (2) the consumer's motivation to comply with the other person's wishes.

The second factor is *unanticipated situational factors* that may erupt to change the purchase intention. If someone loses the job, some other purchase might become more urgent, or a store salesperson may turn him off. Preferences and even purchase intentions are not completely reliable predictors of purchase behaviour.

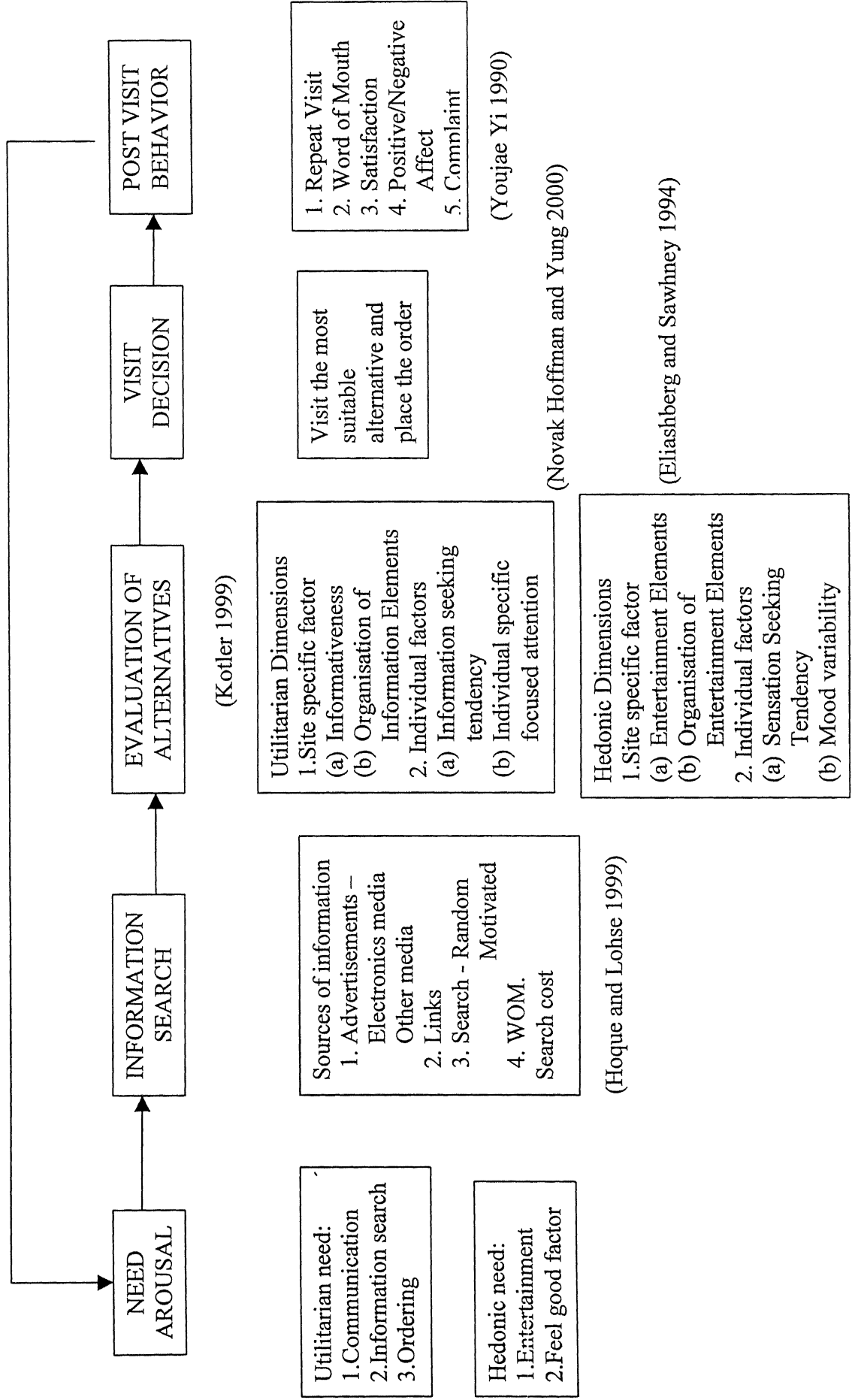
A consumer's decision to modify, postpone, or avoid a purchase decision is heavily influenced by perceived risk. The amount of perceived risk varies with the amount of money at stake, the amount of attribute uncertainty, and the amount of consumer self-confidence. Consumers develop routines for reducing risk, such as decision avoidance, information gathering from friends, and preferences for national brand names and warranties.

#### **Stage 5: Postpurchase Behaviour**

The last stage is post purchase behavior. The post purchase behavior includes visitor complaint, repeat visit, positive/negative affect and word of mouth. After purchasing the product, the consumer will experience some level of satisfaction or dissatisfaction. The buyer's satisfaction is a function of the closeness between the buyer's expectations and the product's perceived performance. If performance falls short of expectations, the customer is *disappointed*; if it meets expectations, the customer is *satisfied*; if it exceeds expectations, the customer is *delighted*.

The consumer's satisfaction or dissatisfaction with the product will influence subsequent behaviour. If the consumer is satisfied, he or she will exhibit a higher probability of purchasing the product again. Dissatisfied consumers may abandon or return the product and are likely to spread the word among their friends.

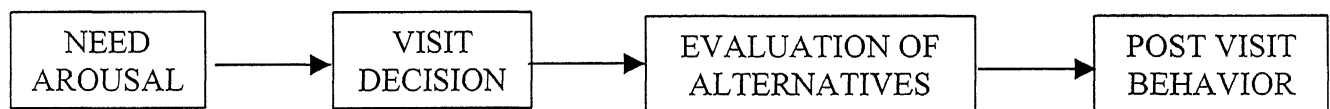
Figure 3.1: Conceptual Model for Visitor Classes 1 and 2 (High Involvement Visitors)



### 3.2.2 Low Involvement Visitors

In case of low involvement visitors of Classes (1) and (2), the visit decision is taken first and the analysis or evaluation is done after that. We must clarify, however, that there is difference between involvement with a product/Web site and the high/low involvement product type dichotomy. A product may be low involvement product but its experiences may be high involving. For example, a *chewing gum* may be low involvement product, by product type definition. Still the experience of chewing a certain type of gum may be an involving experience for an individual, say, for a teenager. On the other hand, a high involvement product may have low involvement experiences. For example, the customer's neighbour helping him in purchasing durable products (e.g., television or computer). By the definition of low/high involvement product, it is a high involving product but consumer's neighbour may not experience high involvement. The person will perceive relevance/involvement, only if one or more of the following is fulfilled – need, value and interest. Also, a high involvement product may generate high involvement experiences. For example, a *car* is both high involvement product type and its consumption experience could also be an involving one for some individuals.

The previous model may be modified for low involvement product types as shown below:



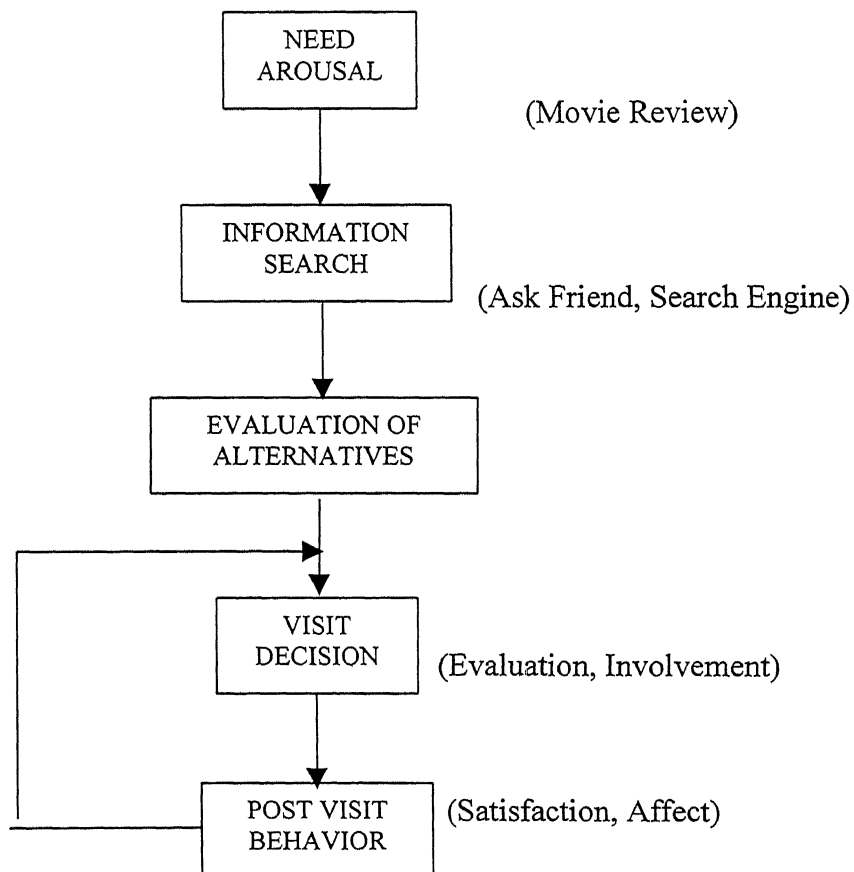
**Figure 3.2: Conceptual Model for Visitor Classes 1 and 2  
(Low Involvement Visitors)**

As shown in Figure 3.2, for low involvement products the purchase/visit decision takes place before the evaluation of alternatives (or evaluation of purchase experience). In this case, since the information search part is insignificant, it is omitted from the above figure. All other stages remain the same. The visitors still have post visit behaviour. The post purchase behavior includes visitor complaint, repeat visit, positive/negative affect and word of mouth.

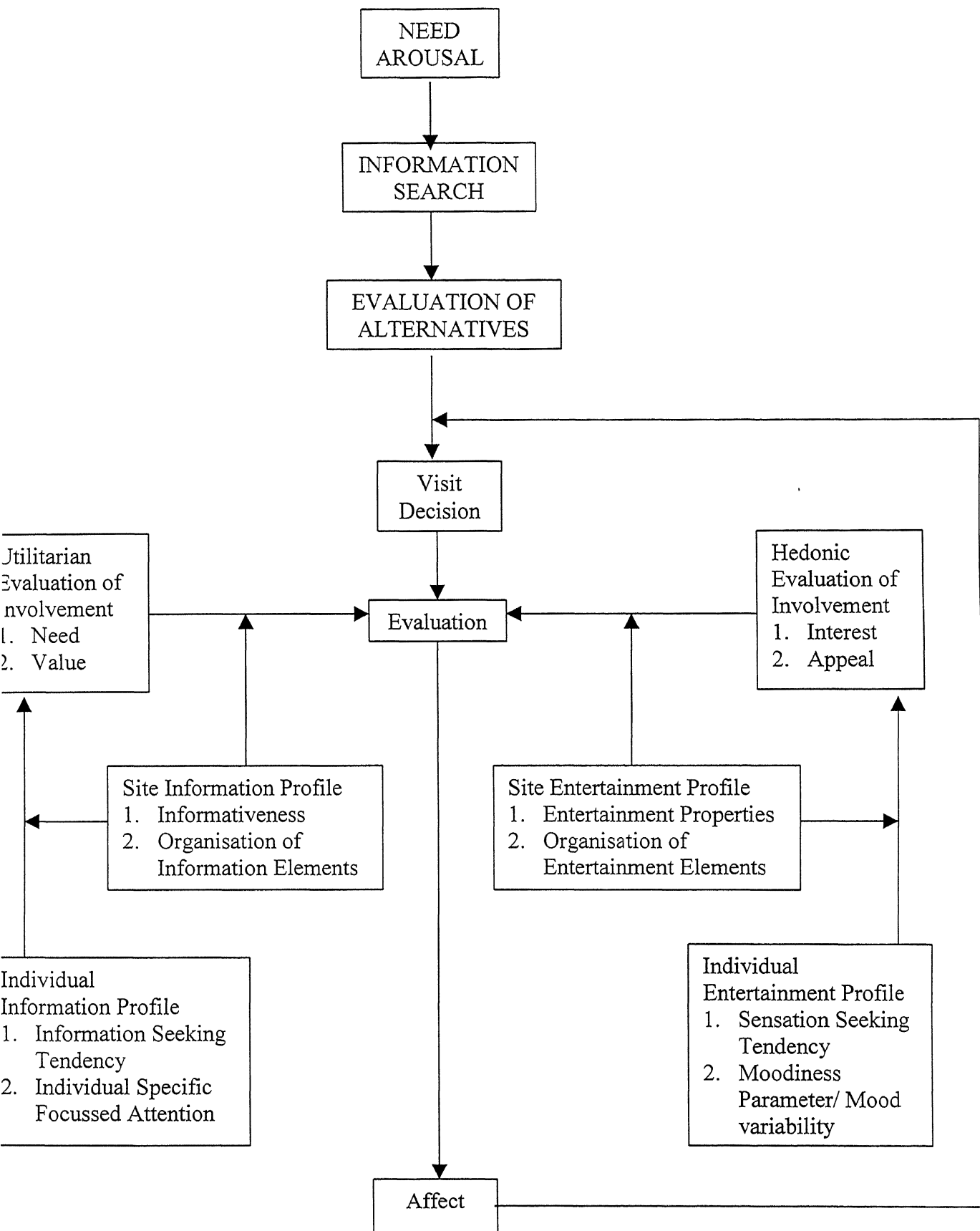
### 3.3 Conceptual Model for Visitor Class 3

Classes (1) and (2) are the cases in which the surfer is choosing between different Web sites for a specific one-time purchase for a longer duration (e.g., choosing a durable product or some service). In Class (3), on the other hand, we consider a case in which a person visits of a Web site for some specific (predefined) information (review/news), either through some referral/search. We are interested in examining the process of the person's involvement with such web site.

In the case of motivated search, the visitor has an identified need and as a result, s/he goes for information search. Suppose s/he goes to search engine and searches for the specified need. Now, s/he starts evaluating alternatives and selects one site and visits it. The selected site may generate positive or negative attitude that will guide his/her post-visit behavior. If the need is not fulfilled, the consumer will come back to stage three and try other alternatives. This cycle may go on unless s/he fulfills the need. The Figures 3.3 and 3.4 show the concise and expanded model for the web site involvement (predefine need) respectively.



**Figure 3.3: Concise Model for Web Site Involvement (Predefined Need)**



**Figure 3.4: Expanded Model for Web Site Involvement (Predefined Need)**

### 3.4 Conceptual Model for Visitor Class 4

In the case of random search, the visitor accidentally comes to know about a site. S/he may come across the site through explicit links, advertisements (electronic media or print media), word of mouth or search results from a search engine.

The data from Bizrate.com, which is a web site that surveys people who make purchases on the web, provides the following results (Reibstein 1999). The sample size is over 8,000,000 respondents. About 47% says that number one referral source is the web. Main constituents of this source is web based and e-mail referral. "Alternative" sources, such as, previous experience with the merchant or a recommendation from a friend/word of mouth was listed as the primary sources for nearly 30% of the purchase dollar volume. Nearly 20% of the time, customers listed print as their primary referral source. However, the majority of print referrals come from either catalogs or direct mail, each with over one third of the referrals from this medium. Gift buyer, in particular, got their cue to buy on the web from catalogs. 2.4% and 1% of the respondents list their primary referral source as television and radio respectively.

The visitor has some *latent need* that arises when s/he is sensitized to the site. This need may arise after coming through a site serendipitously or feeling the flow. In either case, we are talking about a hidden need, which manifests itself only when it is exposed to a need fulfilling or need relevant object, in this case, the content of the web site. For example, suppose a person is a cricket fan, and follows cricket relevant links. He may have visited many web-sites but may still not have come across a web-site, which shows the statistics of all the players in the major league. Now, it may not be his current need to read such statistics, but suppose he accidentally (or by feeling the flow) comes across a web-site, which presents such statistics in a way that the person likes. We could then say that the person had this hidden need all the time but he became aware of its presence only when exposed to the relevant information, or in other words, when exposed to a relevant cue.

This latent need may be a result of interest and/or values the person possesses (or emotional/hedonic desires). The extent of latent need generates *perceived relevance* to the visitor. The person will perceive relevance/involvement with a web-site, if one or more of the following is fulfilled – need, values and interest. (Zaichkowsky 1985). The visitor, after having figured out the site, visits the site. The visitor evaluates a web site on the basis of utilitarian and hedonic dimensions. Utilitarian performance of a

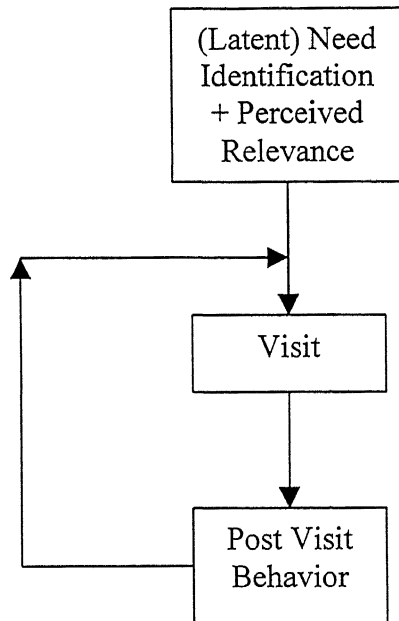
product is seen as performing a useful function. Hedonic performance is valued for its intrinsically pleasing properties. Hedonic evaluation encompasses not only elements of pure pleasantness, but also fun and fantasy. Hence, the utilitarian evaluation relates to need and value of the consumer, whereas hedonic evaluation relates to interest and appeal.

A web site comprises of elements that can be classified into two broad classes: information and entertainment. This is consistent with the popular belief of the Internet as an “infotainment” media. We operationalise a site’s information properties by informativeness and organisation of information elements (Chen and Wells 1999) and site’s entertainment properties by entertainment properties and organisation of entertainment elements (Chen and Wells 1999).

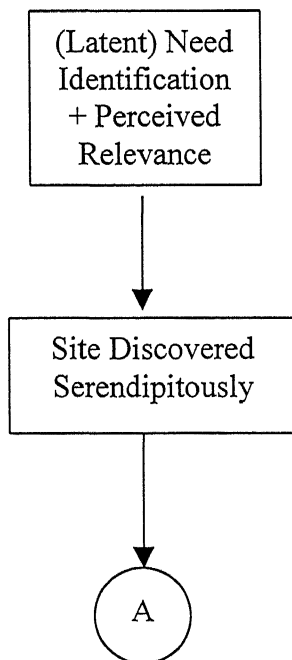
Similar to a web site profile, we generate a web users’ profiles by classifying them using the two major dimensions of information and entertainment properties. We operationalise individual information type by information seeking tendency and focussed attention (Novak, Hoffman and Yung 2000) and individual entertainment type by sensation seeking tendency and mood variability (Eliashberg and Sawhney 1994).

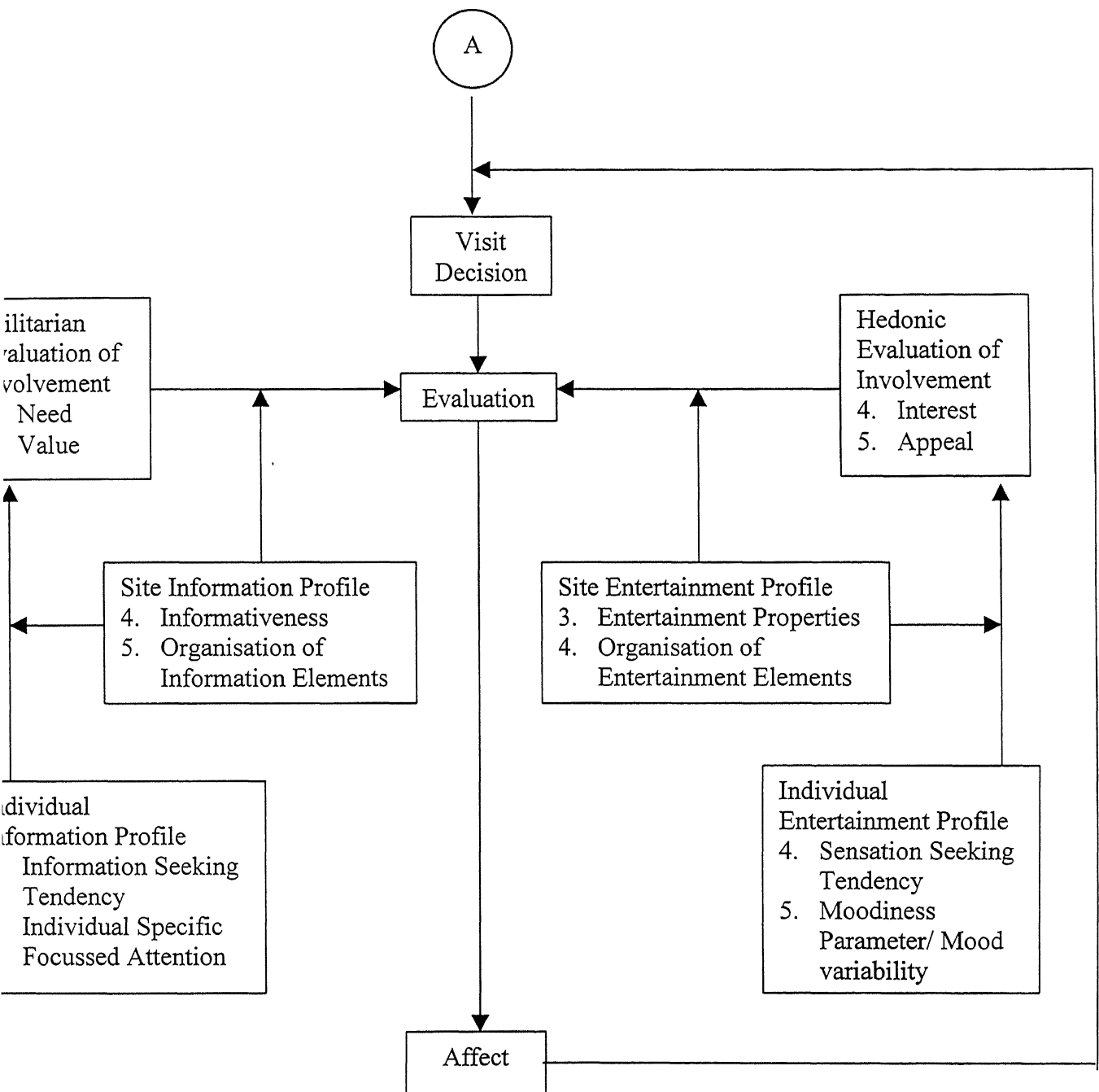
Both utilitarian and hedonic components of product evaluation lead to more positive evaluations (Mano and Oliver 1993). Higher evaluation of web site leads to greater perception of attribute differences, perception of greater product importance, and greater commitment to brand choice (Howard and Sheth 1969). The consumer who evaluates the web site high would perceive greater differences among web enabled product. This proposition stems from writing of Robertson (1976), that suggests that high involvement imply that beliefs about product attributes are strongly held, whereas low involvement individuals do not hold strong belief about product attributes. Once the visitor has positive affect, he may continue to visit the site again, otherwise not. The Figures 3.5 and 3.6 show the concise and expanded model for the web site involvement (latent need) respectively.





**Figure 3.5: Concise Model for Web Site Involvement (Latent Need)**





**Figure 3.6: Expanded Model for Web Site Involvement (Latent Need)**

## CHAPTER 4

### PROPOSED MODEL, HYPOTHESES AND CONSTRUCTS

#### 4.1 The Model to Be Tested

In present thesis, we are investigating the role of involvement on the visitor of Classes (3) and (4), after s/he has decided to visit the site. The site may be found due to predefined search or accidentally. Once the visitor comes to know about the site and if s/he likes, s/he starts using the sites. We want to investigate which factors lead the consumer to stick to one web site than the other. Our analysis starts after the visit decision. The investigation of involvement is important because the insights generated would help generate “sticky,” or involving web sites, a major objective of the web marketers. In general, the study of web site involvement will aid the development, design, and evaluation of commercial web sites.

The popular belief about Internet is that it is an “infotainment” media. Internet is considered as having both information and entertainment elements. Consistent with this point, in the model, we propose that a web site comprises of elements that can be classified into two broad classes: information and entertainment. This is consistent with the popular belief of the Internet as an “infotainment” media. Using the information and entertainment elements, we could generate profile of a web site. For example, a web site with “high – low” profile would provide a lot of information, but not too much entertainment (e.g., web sites related to computer languages or stock market). Similarly, a web site with “low – high” profile would provide a lot of entertainment, but not too much information (e.g., a web site dedicated to movies or a pop singer). In the proposed framework, we operationalise a site’s information properties by informativeness and organisation of information elements (Chen and Wells 1999) and site’s entertainment properties by entertainment properties and organisation of entertainment elements (Chen and Wells 1999).

Similar to a web site profile, we could also generate a web users’ profiles by classifying them using the two major dimensions of information and entertainment properties. In this operationalisation, a web user is a mix of information and entertainment types. Thus, a “high – low” person might use the web primarily for information search, such as, stock quotes, weather updates, and so on. On the other

hand, a “low – high” user might just spend some leisurely time on the web playing games, listening to movies or watching video.

In the proposed framework (refer Figure 4.1), we operationalise individual information type by information seeking tendency and focused attention (Novak, Hoffman and Yung 2000) and individual entertainment type by sensation seeking tendency and mood variability (Eliashberg and Sawhney 1994).

We propose that the utilitarian evaluation of involvement is a function of individual's information profile and hedonic evaluation is a function of individual's entertainment profile. An individual's information profile can be described by two types of construct: information seeking profile and focused attention and individual entertainment profile can also be described by two types of construct: sensation seeking tendency and mood variability. Both utilitarian and hedonic components of product evaluation are expected to lead to more positive evaluation (Mano and Oliver 1993).

The proposed framework has implications for commercial web site design, online advertising, marketing strategies. Theoretically, conceptualizing and modeling web consumers' behaviour can help advance research in this emerging discipline.

## **4.2 Construct Definition**

### **4.2.1 Information Seeking Tendency**

A consumer's information seeking tendency controls his/her behaviour towards search for latest information. If a person is of high information seeking tendency, he/she tries to update his/her knowledge from various sources. The exploratory behavior leads his/her engagement in different sources of information. When such a person hears about a new piece of information, he/she is eager to check it out (Novak, Hoffman and Yung 2000).

### **4.2.2 Individual Specific Focused Attention**

Focused attention refers to a “centering of attention on a limited stimulus field.” Webster et al. (1993) has noted that the computer functions as the limited stimulus field. A person with high focused attention concentrate more during a visit to a web site, and able to extract more information. A person with high focused attention is deeply engrossed.

### 4.2.3 Sensation Seeking Tendency

An individual's preference for total emotional stimulation is the individual difference variable that is considered as a determinant of the individual's enjoyment of hedonic consumption experiences. An individual's desire to seek emotional stimulation (or the Sensation Seeking Tendency) is an important determinant of the enjoyment of hedonic consumption experiences, since it captures the individual's general tendency to actively seek (or avoid) high level of emotional stimulation. Sensation Seeking is defined as "the need for varied, novel and complex sensation and experiences, and the willingness to actively seek out such experiences" (Zuckerman 1979).

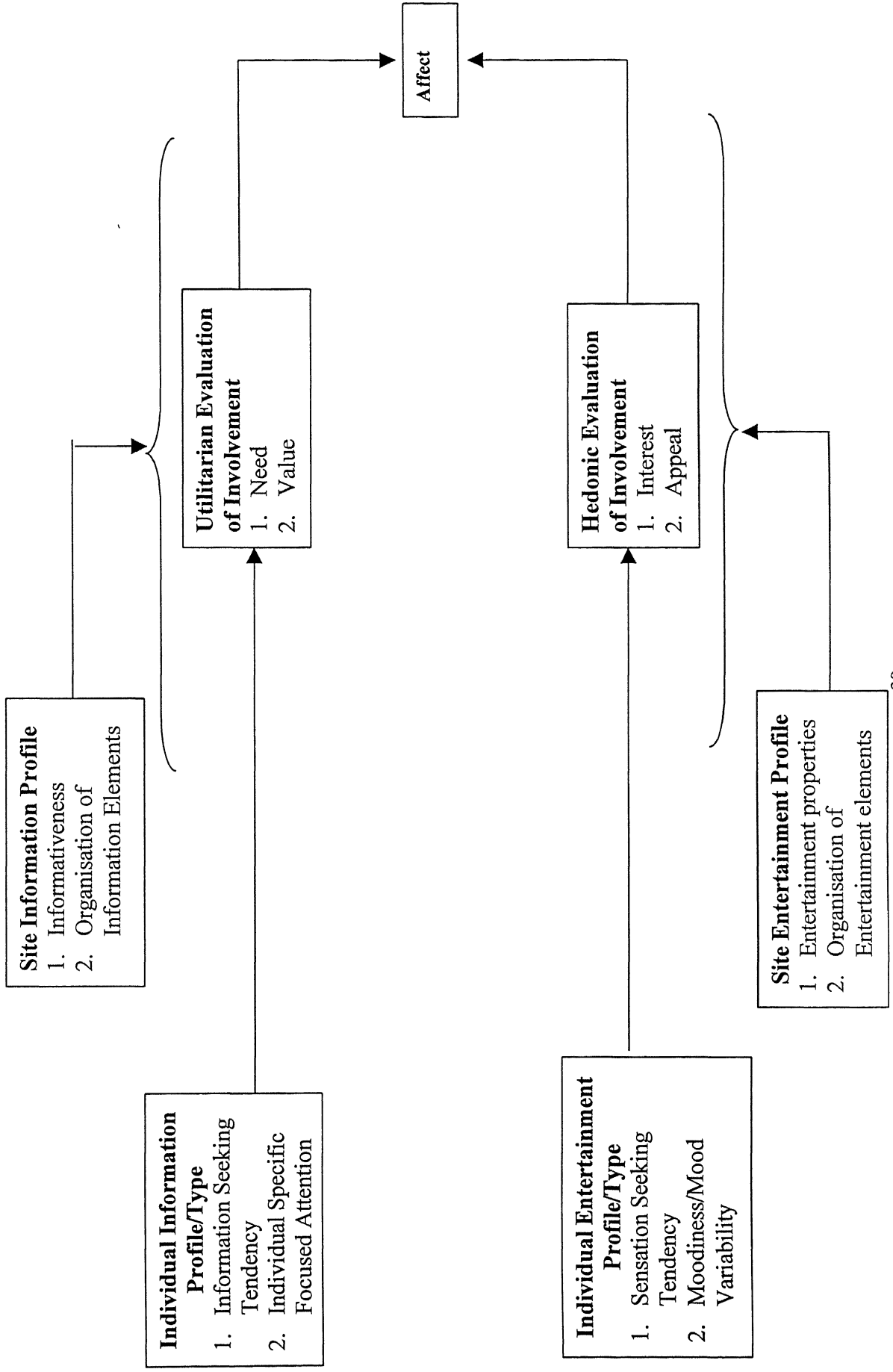
The Sensation Seeking Tendency captures the general propensity of individuals to seek and enjoy emotional stimulation. Some individuals characteristically prefer calm settings, while others prefer high stimulation by engaging in novel and more emotionally stimulating activities. Individuals who desire a greater degree of emotional stimulation are in general expected to enjoy more emotionally stimulating activities, and an individual's enjoyment of hedonic consumption experiences will be determined, in part, by the match between the degree of emotional stimulation provided by the experience, and the degree of stimulation sought by the individual.

### 4.2.4 Mood Variability or Moodiness Parameter

Another individual difference variable is the frequency with which individuals tend to undergo mood changes. The initial moods of an individual determine the tendency of the individual to seek arousal or pleasure at the very outset of the experience. The individual's moods may, however, change during the experience. The duration of a mood may be as small as a minute, or as long as day (Zuckerman 1979). This susceptibility to undergo mood transitions during a hedonic consumption experience is referred as the *moodiness* of the individual.

Underwood and Froming (1980) note that "certain individuals report several mood experiences each day so that their moods are continually changing. In contrast, other people have mood shifts only now and again" (p. 405). They propose a construct that measures long-term variability in moods across individuals, and call it the *reactivity* construct. Reactivity describes the average intensity and frequency with which an individual tends to undergo mood changes in the long run. Our moodiness parameter closely parallels Underwood and Froming's Reactivity construct.

Figure 4.1: Evaluation of Web Sites on Information and Entertainment Properties: The Role of Involvement



#### **4.2.5 Site Information Profile**

Site information profile consists of informativeness and organisation of information elements. The informativeness of a web site is best defined by informative, intelligent contents, knowledgeable, resourceful and up-to-date (Chen and Wells 1999). Organisation of information elements refers how well the information elements are organised in an engaging manner.

#### **4.2.6 Site Entertainment Profile**

Site entertainment profile consists of entertainment properties and organisation of entertainment elements. The entertainment properties of a web site are best defined by five adjectives: fun, exciting, cool, imaginative, and flashy (Chen and Wells 1999). Organisation of entertainment elements refers how well the entertainment elements are organised in an engaging manner.

#### **4.2.7 Utilitarian and Hedonic Evaluation of Involvement**

Involvement may be defined as “a person’s perceived relevance of the object based on inherent needs, values, and interests” (Zaichkowsky 1985). In terms of relevance, value, interest, or need, involvement is a major element in defining and assessing dimensions of product evaluation.

Researchers have focused on two major dimensions of product relevance. The first is the traditional notion of utilitarian or instrumental performance whereby the product is seen as performing a useful function.

The second dimension is that of hedonic or aesthetic performance (Hirschman and Holbrook 1982) whereby products are valued for their intrinsically pleasing properties. Hedonic evaluation encompasses not only elements of pure pleasantness, but also fun and fantasy. Hedonic evaluation could also evoke excitement, activation, and arousal. This two-dimensional approach is frequently typified as one of thinking versus feeling. The utilitarian evaluation relates to need and value of the consumer, whereas hedonic evaluation relates to interest and appeal.

#### **4.2.8 Affect**

Affect has two primary dimensions pleasantness-unpleasantness and arousal-quietness. Positive affect (e.g., elation) is positioned at 45 degree between pleasantness and arousal whereas negative affect (e.g., distress) is positioned at 45 degree between unpleasantness and arousal.

### 4.3 Hypotheses

Based on the proposed framework, we generate the following hypotheses.

#### 4.3.1 Individual Specific Main Effects

An individual specific main effect implies that there exists a direct relationship (i.e., the slope of the regression line as represented by the regression coefficient) between the predictable variable (individual profile) and the criterion variable (utilitarian and hedonic evaluation of involvement).

A consumer's information seeking tendency controls his/her behaviour towards search for latest information. If a person is of high information seeking tendency, he/she tries to update his/her knowledge from various sources. The exploratory behavior leads his/her engagement in different sources of information. When such a person hear about a new piece of information, he/she is eager to check it out (Novak, Hoffman and Yung 2000). Since every web site has some form of information, it is expected that a person with high information seeking tendency would find a web site more needed and valuable than a person with low information seeking tendency.

**Hypothesis 1(A)** – *A web site user with higher information seeking tendency will rate the web site higher on utilitarian evaluation of involvement (i.e., need and value of information sought).*

Focused attention refers to a “centering of attention on a limited stimulus field”. Webster et al. (1993) have noted that the computer functions as the limited stimulus field. A person with high focused attention would concentrate more during a visit to a web site, and would be able to extract more information than a person with low focused attention, and therefore, all else being equal, would find the web site more needed and valuable.

**Hypothesis 1(B)** – *A web site user with higher focused attention will rate the web site higher on utilitarian evaluation of involvement (i.e., need and value of information sought).*

An individual's preference for total emotional stimulation is the individual difference factors that we consider as a determinant of individual's enjoyment of hedonic consumption experiences. The desire for emotional stimulation is a personality construct that has been labeled as the Sensation Seeking Tendency



(Zuckerman 1979). The sensation seeking tendency captures the general propensity of individuals to seek and enjoy emotional stimulation. Individuals belonging to low sensation seeking tendency prefer calm settings, while individuals belonging to high sensation seeking tendency prefer high stimulation by engaging in novel and more emotionally stimulating activities (Eliashberg and Sawhney 1994). Since every web site has some level of emotional stimulation, it is expected that a person with high sensation seeking tendency would find a web site more interesting and appealing than a person with low sensation seeking tendency.

**Hypothesis 2(A)** – *A web site user with higher sensation seeking tendency will rate the web site higher on hedonic evaluation of involvement (i.e., interest and appeal of entertainment sought)*

Another individual difference variable captured in the framework is the frequency with which individuals tend to undergo mood changes (Zuckerman 1979). Many hedonic products are consumed over an extended period of time. The individual's mood and emotions change continuously during the consumption experience (Eliashberg and Sawhney 1994). Individuals belonging to high mood variability would likely to switch in good mood if his/her interest and appeal are satisfied. Since every web site has some form of entertainment properties, it is expected that the web site would interest and appeal more to a person with higher mood variability than a person with low mood variability.

**Hypothesis 2(B)** – *A web site user with higher mood variability will rate the web site higher on hedonic evaluation of involvement (i.e., interest and appeal of entertainment sought).*

Utilitarian performance of a product is seen as performing a useful function (Mano and Oliver 1993). Utility generates a more general form of affect (e.g., liking or disliking). Therefore, it is expected that, a person with higher utilitarian evaluation of involvement would develop more positive affect than a person with lower utilitarian evaluation of involvement.

**Hypothesis 3(A)** – *A web site user with higher utilitarian evaluation of involvement will have more positive affect for the site than a user with lower utilitarian evaluation of involvement*

Hedonic performance is valued for its intrinsically pleasing properties. Hedonic evaluation encompasses not only elements of pure pleasantness, but also fun and fantasy, hedonic evaluation could also evoke excitement, activation, and arousal (Mano and Oliver 1993). Therefore, it is expected that, a person with higher hedonic evaluation of involvement would develop more positive affect than a person with lower hedonic evaluation of involvement.

**Hypothesis 3(B)** – *A web site user with higher hedonic evaluation of involvement will have more positive affect for the site than a user with lower hedonic evaluation of involvement.*

#### **4.3.2 Moderator Effects**

A moderator effect implies that the moderator variable (site specific profile) modifies the form of the relationship (i.e., the slope of the regression line as represented by the regression coefficient) between the predictor variable (individual profile) and the criterion variable (utilitarian and hedonic evaluation of involvement).

The main effect implies that a high information seeker would have utilitarian involvement in general. The moderating effect would suggest that this involvement would be significantly enhanced if the site is informative and organised effectively. Thus, the site's profile has a *moderating* effect on a person's involvement (Novak, Hoffman and Yung 2000). Therefore, a person with high information seeking tendency would find a web site, with high informativeness and better organisation, more needed and valuable than a web site with low informativeness and organisation.

**Hypothesis 4 (A)** – *A web site user with high information seeking tendency will rate a web site with high informativeness and better organisation higher on utilitarian evaluation of involvement than a web site with low informativeness and organisation.*

The main effect implies that a person with high focused attention would have utilitarian involvement in general. The moderating effect would suggest that this involvement would be significantly enhanced if the site is informative and organised effectively. Thus, the site's profile has a *moderating* effect on a person's involvement (Novak, Hoffman and Yung 2000). Therefore, a person with high focused attention would find the web site with high informativeness more needed and valuable than a web site with low informativeness.

**Hypothesis 4 (B)** – *A web site user with high individual specific focused attention will rate a web site with high informativeness and better organisation higher on utilitarian evaluation of involvement than a web site with low informativeness and organisation.*

The enjoyment level is higher when the emotional content of the web site matches the individual's sensation seeking tendency and is lower when there is discrepancy between the emotional content of the web site and the individuals desire to seek (or avoid) emotional stimulation (Eliashberg and Sawhney 1994). Therefore, a person with high sensation seeking tendency would find a web site with high entertainment properties more interesting and appealing than a web site with low entertainment properties.

**Hypothesis 5 (A)** – *A web site user with high sensation seeking tendency will rate a web site with high entertainment and better organisation higher on hedonic evaluation of involvement than a web site with low entertainment and organisation*

When a person with high mood variability visits a web site of high entertainment properties, he/she would likely switch to good mood quickly, resulting in higher involvement. But when he/she visits a web site of low entertainment properties, he/she may not attain a state of good mood quickly, resulting in lower involvement (Underwood and Froming 1980). Therefore, it is expected that a person with high mood variability would find a web site with high entertainment properties more interesting and appealing than a web site with low entertainment properties.

**Hypothesis 5 (B)** – *A web site user with high mood variability will rate a web site with high entertainment and better organisation higher on hedonic evaluation of involvement than a web site with low entertainment and organisation.*

If a person visits a web site, with high information but low entertainment properties, only utilitarian but not hedonic component of the involvement will lead to more positive affective experiences (Mano and Oliver 1993). This is due to the fact that the web site has only high information properties.

**Hypothesis 6 (A) –**

*A web site user with higher utilitarian evaluation will rate a web site with high information properties more positively on affect than a web site with low information properties.*

If a person visits a web site, with high entertainment but low information properties, only hedonic but not utilitarian component of the involvement will lead to more positive affective experiences (Mano and Oliver 1993). This is due to fact that the web site has only high entertainment properties

**Hypothesis 6 (B) –**

*A web site user with higher hedonic evaluation will rate a web site with high entertainment properties more positively on affect than a web site with low entertainment properties.*

## CHAPTER 5

### REASEARCH DESIGN

We conducted our study in three stages. In Stage 1, we collected data for classifying web sites. In Stage 2, we collect data for measurement of involvement and in Stage 3, we collected data for measure of involvement after some fixed duration of time. Before starting first survey, we had to select few web sites from a large pool of web sites. To initiate selection of web sites for the study, we use *www.bestindiansites.com* appraisal. We selected 20 web sites for further analysis.

#### 5.1 The Sample

In the first survey, we collected data for classifying the web sites on the basis of their informativeness and entertainment properties. The sample consists of 91 respondents. This survey was conducted with the help of undergraduate/postgraduate students of age group 18 to 25. Internet is easily accessible to these respondents. This survey was conducted over a period of one month and the responses were collected by requesting the respondents to examine the sites on PC's.

The second survey was used for measuring the involvement and positive affect of the respondents towards a web site. The sample size of this survey was 40. In this survey also, we took the respondents of age group 18 to 25, who were undergraduate/postgraduate students of E-Marketing course at IIT Kanpur. The names of selected web sites were told to the respondents one-week before the start of the survey. They were told to visit the site as many times as they want. The respondents were used in three stages. Each survey was conducted after one week. So, this survey took 21 days to finish.

In Stage three, we investigated the effect of time on the involvement of web users. We appointed a panel of 14 respondents for this study. These respondents were not used in the previous studies. We asked them to visit the sites as frequently as they can. The duration of time between the two surveys was one week. The whole survey took four weeks to complete.

## 5.2 Scales

The study used existing scales for measuring various constructs. In few cases, we modified the existing scales to make them compatible with the local conditions and the constructs of model to be tested. We used existing scales for sensation seeking tendency, mood variability, individual specific focused attention, informativeness, entertainment properties, utilitarian and hedonic evaluation of involvement and affect. We used scales for information seeking tendency and organisation of information and entertainment properties. Exact scales used in surveys are in Appendix 1.

*Information seeking tendency* was measured by a 6 item-scale. We modify the *exploratory behaviour* of Novak, Hoffman and Yung (2000). We made it independent of web sites. We generalised it to measure the individual willingness to seek information (e.g., “I try to update my knowledge from various media”). Initially, there were 7-items, but one of them was deleted to improve the reliability. All items were scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

*Individual specific focussed attention* was taken from Novak, Hoffman and Yung (2000). The scale was composed of four items (e.g., “When visiting a web site my attention is focused”). Each item was scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

*Sensation seeking tendency* was measured by a 6 item-scale. We took this scale from Zuckerman (1979). Initially, we took 9 item for the construct but three items were deleted from the 9-item scale because these three items were resulting to a low reliability. The sensation seeking scale has been tested extensively in the personality literature and found to have good reliability. Each item was scored on true or false.

The 5 item-scale *mood variability* scale was taken from Underwood and Froming (1980). They propose a construct that measures long-term variability in moods across individuals, and call it the Reactivity construct. Reactivity describes the average intensity and frequency with which an individual tends to undergo mood changes in the long run. Our mood variability scales closely parallel Underwood and Froming’s Reactivity construct. Each item was scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

The five-item *informativeness* scale was taken from Chen and Wells (1999). The informativeness of a web site is best defined by informative, intelligent contents, knowledgeable, resourceful and up-to-date. This factor resembles the

informative/relevant scales that have emerged in previous studies of print advertisements and TV commercials. However, while TV-based informative/relevant scales focus on terms like, “meaningful”, “worth remembering” (Wells, Leavitt, and McConville 1971), “convincing,” and “valuable” (Leavitt 1970), the web site *informativeness* factor focuses on the site as an interactive provider. Specifically, “intelligent,” “resourceful,” and “knowledgeable” fit web sites very well but seem less appropriate to TV commercials. With almost unlimited virtual space, and the capacity to be interactive, a web site is expected to offer more personal and insightful content than a fleeting TV impression. A 5-point scoring format (1 = strongly disagree; 5 = strongly agree) was employed for these items.

The seven-item *organisation of information element* scale was taken from two sources. Three items (e.g., “Interacting with the web site is slow and tedious”) were taken from Novak, Hoffman and Yung (2000) and four items (e.g., “I find this web site not messy to use”) were taken from Chen and Wells (1999). All items were scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

The five-item *entertainment* scale was taken from Chen and Wells (2000). We have taken 5 out of the 6 items of entertainment from Chen and Wells (2000). The entertainment properties of a web site were best defined by five adjectives: fun, exciting, cool, imaginative, and flashy. These terms are similar but not identical to terms that loaded high on an “entertaining” dimension often found in raters’ evaluations of TV commercials, e.g., merry, amusing (Wells, Leavitt, and McConville 1971); “lots of fun to watch,” “clever and quite entertaining” (Schlinger 1979); and fast, held attention, and interesting (Moldovan 1984). Items for each scale were scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

*Organisation of entertainment element* scale was taken from Reibstein (1999). This scale consists of three items (e.g., “This web site has animation elements”). All items were scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

*Utilitarian evaluation of involvement* was taken from the Mano and Oliver (1993). This construct comprises of 2 separate scales. The first scale *need* was composed of six items (e.g., “vital,” “needed,” “essential,” “fundamental,” “beneficial,” and “useful”). The second scale *value* was composed of seven items (e.g., “important,” “means a lot to me,” “relevance,” “valuable,” “matters to me,” “of

concern to me,” and “significant”). Seven point semantic differential score was used for each item.

*Hedonic evaluation of involvement* was also taken from the Mano and Oliver (1993). This construct comprises of 2 separate scales. The first scale *interest* was composed of three items (e.g., “exciting,” “interesting,” and “fascinating”). The second scale *appeal* was composed of two items (e.g., “appealing,” and “desirable”). Seven point semantic differential score was used for each item.

The *affect (positive/negative)* scale was taken from Novak, Hoffman and Yung (2000). The affect has four items (e.g., “After visiting the web site I feel pleased.”) Each item was scored on a 5-point scale, ranging from “strongly disagree” to “strongly agree.”

### 5.3 Tests for Individual Specific Main Effects

An individual specific main effect implies that there exists a direct relationship (i.e., the slope of the regression line as represented by the regression coefficient) between the predictable variable (individual profile) and the criterion variable (utilitarian and hedonic evaluation of involvement).

For hypotheses testing, we use multiple regression technique. Hypothesis 1(A) to Hypothesis 3(B) are related to main effects. Hypotheses 1(A) and 1(B) are related to relationship between individual information profile and utilitarian evaluation of involvement. Hypotheses 2(A) and 2(B) are related to relationship between individual entertainment profile and hedonic evaluation of involvement. We took utilitarian evaluation of web site as the dependent variable, and individual specific information seeking tendency and individual specific focussed attention as independent variables. Then we perform regression analysis by specifying the following model.

$$Y_1 = \alpha_1 * X_1 + \alpha_2 * X_2 + e_1$$

where  $Y_1$  is utilitarian evaluation of web site involvement.  $X_1$  and  $X_2$  are individual specific information seeking tendency and individual specific focussed attention respectively.

Similarly, the regression model for hedonic evaluation of web site as dependent variable and individual specific sensation seeking tendency and mood variability as independent variables is

$$Y_2 = \beta_1 * X_3 + \beta_2 * X_4 + e_2$$



where  $Y_2$  is hedonic evaluation of web site involvement.  $X_3$  and  $X_4$  are individual sensation seeking tendency and mood variability respectively.

Hypotheses 3(A) and 3(B) are related to the effect of utilitarian evaluation and hedonic evaluation of involvement on affect respectively. We take regression equation for positive affect as follows

$$Z_1 = \gamma_1 * Y_1 + \gamma_2 * Y_2 + e_1$$

Where  $Z_1$  is positive affect and  $Y_1$  and  $Y_2$  are utilitarian evaluation of involvement and hedonic evaluation of involvement respectively.

#### 5.4 Tests for Moderator Effects

A moderator effect implies that the moderator variable (site specific profile) modifies the form of the relationship (i.e., the slope of the regression line as represented by the regression coefficient) between the predictor variable (individual profile) and the criterion variable (utilitarian and hedonic evaluation of involvement).

The last six hypotheses 4(A) to 6(B) are related to moderator relationship. The first two 4(A) and 4(B) are related to individual information profile, site information profile and utilitarian evaluation of involvement. The next two 5(A) and 5(B) are related to individual entertainment profile, site entertainment profile and hedonic evaluation of involvement. The last two hypotheses 6(A) and 6(B) are related to sites profiles, utilitarian and hedonic evaluation of involvement and affect.

For testing the moderator effect hypotheses, we use the same regression equations as we used for testing the main effect hypotheses. But in case of moderator effects we performed regression separately for each web sites, unlike to main effects where we regress whole data set irrespective of web sites. Thus, in case of moderator effects, we have separate results for each web site.

## CHAPTER 6

### DATA COLLECTION

The data collection procedure was carried out in three surveys. In the first survey, we collect data for classifying web sites and in the second survey, we collect data for measurement of involvement. In third survey, we collect data for measure of involvement after some fixed duration of time Initially, however, we conduct judges-based procedure to select web sites for conducting survey.

#### 6.1 Selection of Web Sites

For testing of hypotheses, we require classification of web sites on the basis of information and entertainment properties of a web site. After classification we will have a 2 X 2 (Information properties X Entertainment properties) matrix as given below:

**Table 6.1: 2 X 2 (Information properties X Entertainment properties) matrix for web sites**

	Entertainment Properties		
		High	Low
	High		
	Low		

From a large pool of web sites, we have to select a few web sites so that we are able to perform survey on those web sites.

To initiate selection of web sites for our study, we use *www.BestIndianSites.com* appraisal. The *BestIndianSites.com* consultants appraise each site. Following parameters are taken into consideration while evaluating India's Top 50 web sites:

Traffic ratings by various traffic ranking tools

Cross links with search engines/other sites

Ratings on various Quality parameters: Load Time, Browser compatibility

HTML validity, Contents, Site Design

Listings in Major Search Engines

The following steps were taken for primary selection of web sites:

**Step1:** We use “Top 50 web sites” data by *www.bestindiansites.com* for duration of 6 months (20 weeks from July 1999 – December 1999). We give one point if the web site appears in the Top 50 list in a week, and zero otherwise. We then sum to get the total number of times a web site appeared in the Top 50 list during the six month. The pool of web site after this step is listed in Table A2 (refer Appendix 2).

**Step 2:** Using a cut-off value of 70%, we discarded the web sites that are appeared in the list less than 70% of time.<sup>1</sup> The pool of web site after this step is listed in Table A3 (refer Appendix 3).

**Step 3:** After that, all above web sites were classified on the basis of information and entertainment properties of web sites (refer Appendix 4). The classification was done by three *independent judges*, who are postgraduate students in the IIT Kanpur and surf the web for last two years on average of above 30 hours per week. The following information was given to the judges for placing the web sites in the respective quadrants:

- (a) The respondents to evaluate these web sites would be students in the age group of 18 to 25 years.
- (b) All web sites should be easy to understand by Indian students so that there are no cultural differences.
- (c) All web sites should be of general interest without any regional biases within India.

The judges were asked to spend enough time on each of above mentioned web sites and get familiar with the content of web sites on information and entertainment properties. Then they were asked to place the web sites in the appropriate quadrant of Table 6.1.

In each quadrant, we retain only those web sites for which there were no differences among judges regarding their location. After this step, we have the web sites in each quadrant as shown in Table 6.2:

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<sup>1</sup> We added two more web sites, *www.nazara.com* and *www.paheli.com*, because they were found to be popular among local IITK students.

**TABLE 6.2: Web Sites Classified by the Judges on the Basis of Information and Entertainment Properties.**

	Entertainment Properties		
		High	Low
Information Properties	High	<a href="http://www.rediff.com">www.rediff.com</a> <a href="http://www.123india.com">www.123india.com</a> <a href="http://www.indiainfo.com">www.indiainfo.com</a> <a href="http://www.indiatimes.com">www.indiatimes.com</a> <a href="http://www.indya.com">www.indya.com</a> <a href="http://www.webindia.com">www.webindia.com</a>	<a href="http://www.mapsofindia.com">www.mapsofindia.com</a> <a href="http://www.timesofindia.com">www.timesofindia.com</a> <a href="http://www.naukari.com">www.naukari.com</a> <a href="http://www.indiainfoline.com">www.indiainfoline.com</a>
	Low	<a href="http://Www.khel.com">Www.khel.com</a> <a href="http://www.smashits.com">www.smashits.com</a> <a href="http://www.indiafm.com">www.indiafm.com</a> <a href="http://www.nazara.com">www.nazara.com</a> <a href="http://www.paheli.com">www.paheli.com</a>	<a href="http://www.allindia.com">www.allindia.com</a> <a href="http://www.dgreetings.com">www.dgreetings.com</a> <a href="http://www.theholidays.com">www.theholidays.com</a> <a href="http://www.indiaserver.com">www.indiaserver.com</a> <a href="http://www.ciol.com">www.ciol.com</a>

To validate the correctness of the above classification by judges, we then contacted a larger group of respondents as discussed below.

## 6.2 Survey 1 – Classification of Web Sites

Survey 1 is used for classifying the web sites on the basis of their information and entertainment properties. This survey was conducted with the help of undergraduate/postgraduate students of age group 18 to 25. We selected the 20 shortlisted web sites<sup>2</sup> for this survey shown in Table 6.2. We assign web sites randomly to respondents. We also provide some manipulation checks. The questionnaire used for this survey consists of scales related to *informativeness* and *organisation of information elements* and *entertainment elements* and *organisation of entertainment elements* of a web site (refer Appendix 4).

<sup>2</sup> In the above-mentioned 20 web sites, two web sites were not rated by any respondents. So we discarded them from our further study. The two web sites were [www.indiaserver.com](http://www.indiaserver.com) and [www.ciol.com](http://www.ciol.com).

The average of information and entertainment properties of each web sites is as follows (on a scale of 1 to 5):

**Table 6.3: Score of Web Sites on Information and Entertainment Properties.**

SL No	Name of Web sites	Information average	Entertainment average
1	www.rediff.com	4.367	3.650
2	www.123india.com	3.917	3.650
3	www.indiainfo.com	3.883	3.325
4	www.indiatimes.com	3.900	3.900
5	www.indya.com	3.717	3.650
6	www.webindia.com	3.667	2.875
7	www.mapsofindia.com	3.917	3.281
8	www.timesofindia.com	4.183	3.600
9	www.naukari.com	3.708	2.875
10	www.indiainfoline.com	4.133	3.125
11	www.allindia.com	3.375	2.688
12	www.dgreetings.com	3.867	3.700
13	www.theholidayspot.com	3.467	3.875
14	www.khel.com	3.958	3.396
15	www.smashits.com	2.861	3.021
16	www.indiafm.com	3.617	3.650
17	www.nazara.com	3.438	3.844
18	www.paheli.com	3.367	3.725
	Mean	3.7504	3.4291

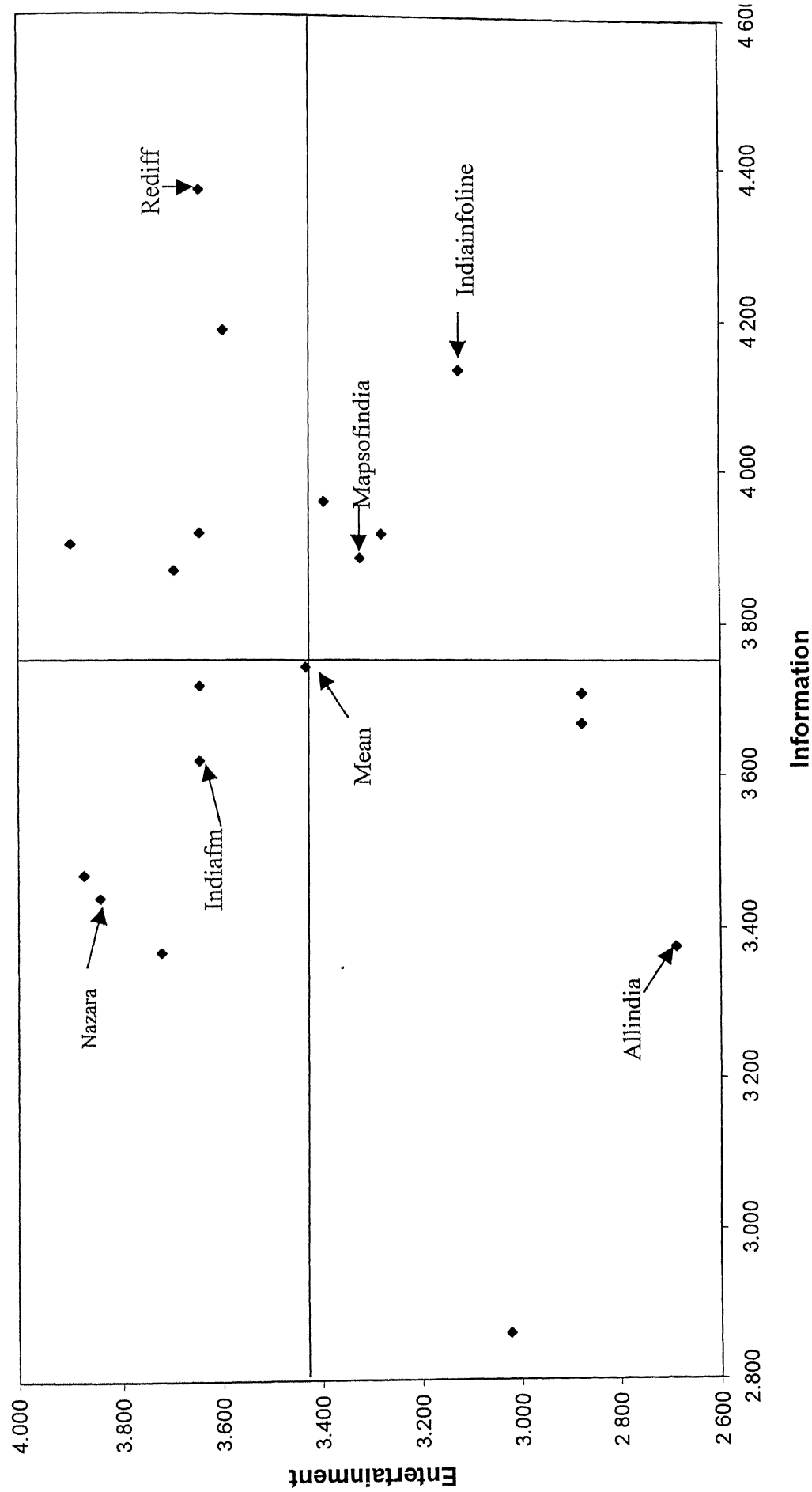
We now draw a graph to see the relative positioning of the web sites on the information and entertainment scales. Figure 6.1 shows relative position of web sites on the information and entertainment scale. On the basis of Figure 6.1, we arrive at the following classification.

**TABLE 6.4: Classification of Web Sites on Information and Entertainment Properties Score**

	Entertainment Properties		
		High	Low
	High	www.rediff.com www.123india.com www.indiatimes.com www.timesofindia.com www.dgreetings.com www.indiafm.com	www.mapsofindia.com www.indiainfo.com www.indiainfoline.com www.khel.com
Information Properties	Low	www.indya.com www.theholidayspot.com www.nazara.com www.paheli.com	www.allindia.com www.smashits.com www.webindia.com www.naukari.com

We compare Tables 6.2 and 6.4 and select those web sites that are common to both for a particular quadrant. Therefore, we selected *www.rediff.com*, *www.indiainfoline.com*, *www.allindia.com*, *www.nazara.com*, *www.mapsofindia.com* and *www.indiafm.com* for further analysis. We selected two additional web sites that are close to the origin for our study. These web sites are *www.mapsofindia.com* and *www.indiafm.com*.

Figure 6.1: Relative Position of Web Sites on the Basis of Information and Entertainment Scores



### 6.3 Introduction of Finally Shortlisted Web Sites

A brief introduction of the finally shortlisted web sites is given below:

**Rediff.com** – Rediff.com is a portal that specializes in news, weather, tickets, gifts and links to Non-resident Indians (NRI's) and market leaders. The web site claims "One can do almost anything that he/she would like to do on the Internet. One can – Communicate better, Simplify routine work, Find useful information, Plan your life, Have fun, Stay informed, Enhance career and Buy and sell". This site is located in *high information – high entertainment* quadrant because it provides both information (e.g. news, weather, stock market, career and IT education etc.) and entertainment (e.g. receive and send e-mail, fun, humour, the latest movie news and sporting activities etc).

**MapsofIndia.com** – MapsofIndia.com has maps of all the major sectors in the country including the *Overview, Census, Infrastructure & Transport, Railway, Road and Tourism Maps, States and Union territories, Districts and City Specific Maps*. This site is located in *high information – low entertainment* quadrant because it provides maps of India with states and union territories, city and district maps, tourism maps and educational maps, but not many entertainment elements.

**IndiaInfoline.com** – IndiaInfoline.com is the premier site in India for knowing about business, investment and finance. The breadth and depth of the content ranges from stock markets, mutual funds, personal finance to law, taxation and economy. This site is located in *high information – low entertainment* quadrant because it deals mainly with stock markets, investment, personal finance and taxation and economy.

**Allindia.com** conceptualizes and creates software and Internet solutions for a diverse mix of corporate clients. This site is located in *low information – low entertainment* quadrant because of its perceived low relevance to engineering student population.

**Indiafm.com** provides information about Indian movie industry. The major sections this web site are movie reviews, release dates, concert listing, results from box-office and cine awards given by different sponsors and interviews of celebrities. This site is located in *low information – high entertainment* quadrant because it provides results from box office, movie review, cine awards and interview of celebrities.

**Nazara.com** provides information related to Hollywood as well as Bollywood (India's movie industry) movies. In Movie section it provides information related to Awards, Reviews, Child Snippets, Features, Nostalgia, News and Stuff, Download, Now Showing, Profiles, Star of the month, Interviews, Regional Spice and Photo



Gallery. There are lots of sections on similar topics like music, television and theatre. This site is located in *low information – high entertainment* quadrant because it provides information related to movies, television and theatre, photo galleries, cine awards and interview of celebrities.

#### **6.4 Survey 2 – Measurement of Involvement**

Survey 2 is used for measuring the involvement and positive affect of respondents towards a web site. This survey was conducted with the help of 40 undergraduate/postgraduate students in the age group of 18 to 25. This stage of survey has two steps. In first step, we perform survey related to individual characteristics pertaining to information and entertainment profile of the respondents. This round of survey was performed in the classroom since the questionnaire was not related to web sites. This questionnaire (refer Appendix 5) contains scale related to *Sensation Seeking Tendency, Mood Variability, Information Seeking Tendency* and *Individual Specific Focussed Attention*. Once the respondents fill the first questionnaire they were asked to proceed for the second questionnaire of the survey. In second step we call the respondents in the systems laboratory and ask each of them to sit on a computer terminal. Respondents were given a questionnaire with name of randomly assigned web sites written on it. They were instructed to spend enough time to get accustomed with the web site assigned to them, after which they could fill the questionnaire. The latter questionnaire (refer Appendix 6) is related to the measurement of *utilitarian evaluation of involvement, hedonic evaluation of involvement* and *positive affect* of a web site on the respondent

#### **6.5 Survey 3 – Effect of Time on Involvement**

In Survey 1 and 2, we studied the role of involvement of a respondent in evaluation of web sites. In these studies, however, we have measured the involvement without considering the effect of time. In Survey 3, we investigated the effect of time on the involvement of web users. In this survey, we measured involvement of a respondent after some fixed duration of time. We appoint a panel of 14 respondents for this study. We asked them to fill the questionnaire pertaining to individual's information and entertainment profile (refer Appendix 5). We investigated following four types of respondents in our time base study:

1. A person with high on both the profiles (information as well as entertainment)
2. A person with high on information but low on entertainment profile
3. A person with low on information but high on entertainment profile
4. A person with low on both the profiles (information as well as entertainment).

We asked the respondents to fill the questionnaire related to involvement and affect (refer Appendix 6) at one point in time. Then, we have their measure of involvement at time, say  $t_1$ . Again we call the same respondents after one week and asked them to fill the same questionnaire (refer Appendix 6) for the same web site. This time we have their measure of involvement at time  $(t_1+1)$ . Similarly, we repeated the process for two more weeks. Then we have their measure of involvement for four consecutive observations. After that we tried to see the effect of time on involvement.

1. A person with high on both the profiles (information as well as entertainment)
2. A person with high on information but low on entertainment profile
3. A person with low on information but high on entertainment profile
4. A person with low on both the profiles (information as well as entertainment).

We asked the respondents to fill the questionnaire related to involvement and affect (refer Appendix 6) at one point in time. Then, we have their measure of involvement at time, say  $t_1$ . Again we call the same respondents after one week and asked them to fill the same questionnaire (refer Appendix 6) for the same web site. This time we have their measure of involvement at time  $(t_1+1)$ . Similarly, we repeated the process for two more weeks. Then we have their measure of involvement for four consecutive observations. After that we tried to see the effect of time on involvement.

## RESULTS AND ANALYSIS

We perform statistical analysis using *STATISTICA* software on the collected data from survey 1 and survey 2.

### 7.1 Cronbach Alpha for the Constructs

The following Cronbach alpha values were found for the various constructs:

Scale	Cronbach alpha
Information Seeking Tendency	0.62
Individual Specific Focussed Attention	0.64
Sensation Seeking Tendency	0.55
Mood Variability	0.68
Site Information Profile	0.79
Site Entertainment Profile	0.70
Utilitarian Evaluation of Involvement	
Need	0.88
Value	0.90
Hedonic Evaluation of Involvement	
Interest	0.83
Appeal	0.81
Positive Affect	0.77

Some low values of alpha could be attributed to low inter-item correlation. For example, in case of sensation seeking tendency (SST), scales related to only thrill and adventure seeking are included.

For hypotheses testing, we use multiple regression technique. The results of individual specific main effects are shown in Table 7.1 and the results of moderator effects are shown in Table 7.2.

Table 7.2: Results of Moderator Relationship

Dependent variable	Utilitarian Evaluation of Involvement				Hedonic Evaluation of Involvement				Positive Affect			
	Information Seeking Tendency	Individual Specific Focussed Attention	Adjusted R <sup>2</sup>	$\alpha_1$ (t-statistic)	$\alpha_2$ (t-statistic)	Sensation Seeking Tendency	Mood Variability	Adjusted R <sup>2</sup>	Utilitarian Evaluation of Involvement	Hedonic Evaluation of Involvement	Adjusted R <sup>2</sup>	
Name of web site						$\beta_1$ (t-statistic)	$\beta_2$ (t-statistic)	Adjusted R <sup>2</sup>	$\gamma_1$ (t-statistic)	$\gamma_2$ (t-statistic)	Adjusted R <sup>2</sup>	
Rediff	0.940 (2.912)	0.038 (0.119)	0.949	0.156 (0.708)	0.792 (3.600)	0.858	0.664 (3.340)	0.328 (1.650)	0.972			
Mapsofindia	0.663 (4.250)	0.335 (2.148)	0.984	0.239 (1.580)	0.751 (4.968)	0.925	0.707 (4.330)	0.292 (1.788)	0.990			
Indiainfo	0.868 (2.349)	0.117 (0.315)	0.962	0.0309 (0.242)	0.951 (7.426)	0.947	0.632 (2.731)	0.365 (1.577)	0.988			
Allindia	0.285 (0.669)	0.703 (1.651)	0.950	-1.755 (-1.802)	2.596 (2.665)	0.802	0.766 (1.726)	0.229 (0.517)	0.981			
Indiafm	0.813 (2.255)	0.151 (0.418)	0.909	0.099 (0.796)	0.888 (7.161)	0.939	0.282 (1.339)	0.707 (3.355)	0.960			
Nazara	0.321 (0.960)	0.655 (1.955)	0.938	0.232 (1.057)	0.719 (3.277)	0.854	0.393 (1.496)	0.598 (2.273)	0.973			

The result suggests that utilitarian evaluation of involvement is affected by two factors individual information seeking tendency and individual specific focussed attention. From the table, it is clear that both factors are positive and significant. Hence Hypotheses 1(A) and 1(A) are supported. The effect of individual information seeking tendency on utilitarian evaluation of involvement ( $\alpha_1 = 0.647$ ,  $t = 4.944$ ) is more significant than that of individual specific focussed attention ( $\alpha_2 = 0.330$ ,  $t = 2.520$ ).

Similarly the results suggest that hedonic evaluation of involvement is affected by two factors individual specific sensation seeking tendency and individual specific mood variability. Both factors are positive but only one factor (mood variability) is significant. Hence, it supports Hypothesis 2(B) but does not provide enough support for Hypothesis 2(A). This may be due to fact that whole effect of hedonic evaluation of involvement has been explained by the mood variability. If we take more data points, then we might be able to also see the effect of sensation seeking tendency. The effect of individual specific mood variability on hedonic evaluation of involvement ( $\beta_1 = 0.817$ ,  $t = 10.310$ ) is much more significant than that of individual specific sensation seeking tendency ( $\beta_2 = 0.142$ ,  $t = 1.787$ ).

The last result of Table 7.1 suggests that positive affect is also affected by two factors – utilitarian and hedonic evaluation of involvement. Since both the independent variables are positive and significant, it supports Hypotheses 3(A) and 3(B). The effect of hedonic evaluation of involvement on positive affect ( $\gamma_2 = 0.577$ ,  $t = 6.398$ ) is much more significant than that of utilitarian evaluation of involvement ( $\gamma_1 = 0.415$ ,  $t = 4.597$ ).

### 7.2.2 Results Related to Moderator Relationship

Hypotheses 4(A) to 6(B) are related to moderator relationship. For testing the moderator effect hypotheses, we use the same regression equations as we used for testing the main effect hypotheses. But in case of moderator effects we performed regression separately for each web sites, unlike to main effects where we regress whole data set irrespective of web sites. Thus, in case of moderator effects, we have separate results for each web site. The results are shown in Table 7.2. The followings are the conclusions:

1. **Case of rediff.com:** In case of rediff.com (high information and high entertainment) the results show that for utilitarian evaluation of involvement, individual specific information seeking tendency is significant ( $\alpha_1 = 0.940$ ,  $t = 2.912$ ) which support Hypothesis 4(A). But for utilitarian evaluation of involvement, individual specific focussed attention is not significant ( $\alpha_2 = 0.038$ ,  $t = 0.119$ ) which does not support Hypothesis 4(B). This may be due to small sample size (about 20) we have for rediff.com.

For hedonic evaluation of involvement, individual specific mood variability is significant ( $\beta_2 = 0.792$ ,  $t = 3.600$ ) which supports Hypothesis 5(B). But for hedonic evaluation of involvement, individual specific sensation seeking tendency is not significant ( $\beta_1 = 0.156$ ,  $t = 0.708$ ) which does not support Hypothesis 5(A). We can interpret from above results that individual specific mood variability has more effect on hedonic evaluation than sensation seeking tendency.

For positive affect, utilitarian evaluation of involvement is significant ( $\gamma_1 = 0.664$ ,  $t = 3.340$ ) and hedonic evaluation of involvement is not significant ( $\gamma_2 = 0.328$ ,  $t = 1.650$ ) which support Hypothesis 6(A).

**2. Case of indiainfoline.com:** In case of indiainfoline.com (high information but low entertainment) the results show that for utilitarian evaluation of involvement, individual specific information seeking tendency is significant ( $\alpha_1 = 0.868$ ,  $t = 2.349$ ) which supports Hypothesis 4(A). But for utilitarian evaluation of involvement, individual specific focussed attention is not significant ( $\alpha_2 = 0.117$ ,  $t = 0.315$ ) which does not support Hypothesis 4(B).

For hedonic evaluation of involvement, individual specific mood variability is significant ( $\beta_2 = 0.951$ ,  $t = 7.426$ ) which does not support Hypothesis 5(B). But for hedonic evaluation of involvement, individual specific sensation seeking tendency is not significant ( $\beta_1 = 0.031$ ,  $t = 0.242$ ) which supports Hypothesis 5(A).

For positive affect, utilitarian evaluation of involvement is significant ( $\gamma_1 = 0.632$ ,  $t = 2.731$ ) and hedonic evaluation of involvement is not significant ( $\gamma_2 = 0.365$ ,  $t = 1.577$ ) which support Hypothesis 6(A).

**3. Case of mapsofindia.com:** In case of mapsofindia.com (high information but low entertainment) the results show that for utilitarian evaluation of involvement, both individual specific information seeking tendency ( $\alpha_1 = 0.663$ ,  $t = 4.250$ ) and

individual specific focussed attention are significant ( $\alpha_2 = 0.335$ ,  $t = 2.148$ ), which support Hypotheses 4(A) and 4(B).

For hedonic evaluation of involvement, individual specific mood variability is significant ( $\beta_2 = 0.751$ ,  $t = 4.968$ ) which does not support Hypothesis 5(B). But for hedonic evaluation of involvement, individual specific sensation seeking tendency is not significant ( $\beta_1 = 0.239$ ,  $t = 1.580$ ) which supports Hypothesis 5(A).

For positive affect, utilitarian evaluation of involvement is significant ( $\gamma_1 = 0.707$ ,  $t = 4.330$ ) and hedonic evaluation of involvement is not significant ( $\gamma_2 = 0.292$ ,  $t = 1.788$ ) which support Hypothesis 6(A).

**4. Case of nazara.com:** In case of nazara.com (low information but high entertainment) the results show that for utilitarian evaluation of involvement, individual specific information seeking tendency is not significant ( $\alpha_1 = 0.321$ ,  $t = 0.960$ ) which supports Hypothesis 4(A). But for utilitarian evaluation of involvement, individual specific focussed attention is significant ( $\alpha_2 = 0.655$ ,  $t = 1.955$ ) which does not support Hypothesis 4(B).

For hedonic evaluation of involvement, individual specific mood variability is significant ( $\beta_2 = 0.719$ ,  $t = 3.277$ ) which supports Hypothesis 5(B). But for hedonic evaluation of involvement, individual specific sensation seeking tendency is not significant ( $\beta_1 = 0.2332$ ,  $t = 1.057$ ) which does not support Hypothesis 5(A).

For positive affect, hedonic evaluation of involvement is significant ( $\gamma_2 = 0.598$ ,  $t = 2.273$ ) and utilitarian evaluation of involvement is not significant ( $\gamma_1 = 0.393$ ,  $t = 1.496$ ) which support Hypothesis 6(B).

**5. Case of indiafm.com:** In case of indiafm.com (low information but high entertainment) the results show that for utilitarian evaluation of involvement, individual specific information seeking tendency is significant ( $\alpha_1 = 0.813$ ,  $t = 2.255$ ) which does not support Hypothesis 4(A). But for utilitarian evaluation of involvement, individual specific focussed attention is not significant ( $\alpha_2 = 0.151$ ,  $t = 0.418$ ) which supports Hypothesis 4(B).

For hedonic evaluation of involvement, individual specific mood variability is significant ( $\beta_2 = 0.888$ ,  $t = 7.161$ ) which supports Hypothesis 5(B). But for hedonic evaluation of involvement, individual specific sensation seeking tendency is not significant ( $\beta_1 = 0.099$ ,  $t = 0.796$ ) which does not support Hypotheses 5(A).



For positive affect, hedonic evaluation of involvement is significant ( $\gamma_2 = 0.707$ ,  $t = 3.355$ ) and utilitarian evaluation of involvement is not significant ( $\gamma_1 = 0.282$ ,  $t = 1.339$ ) which support Hypothesis 6(B).

**6. Case of allindia.com:** In case of allindia.com (low information and low entertainment) the results show that for utilitarian evaluation of involvement, both individual specific information seeking tendency ( $\alpha_1 = 0.285$ ,  $t = 0.669$ ) and individual specific focussed attention are not significant ( $\alpha_2 = 0.703$ ,  $t = 1.651$ ) which support Hypotheses 4(A) and 4(B).

For hedonic evaluation of involvement, individual specific mood variability is significant ( $\beta_2 = 2.596$ ,  $t = 2.665$ ) which does not support Hypothesis 5(B). But for hedonic evaluation of involvement, individual specific sensation seeking tendency is not significant ( $\beta_1 = -1.755$ ,  $t = -1.2$ ) which supports Hypothesis 5(A).

For positive affect, both utilitarian ( $\gamma_1 = 0.766$ ,  $t = 1.726$ ) and hedonic evaluation of involvement ( $\gamma_2 = 0.229$ ,  $t = 0.517$ ) are not significant which support Hypotheses 6(A) and 6(B).

### **7.3 Overall Conclusions**

#### **7.3.1 Main Effects**

Looking at the results we found that Hypotheses 1(A) and 1(B) are supported as utilitarian evaluation of involvement is affected by two factors individual information seeking tendency and individual specific focussed attention. Hypothesis 2(B) is supported as positive and significant relationship exists between individual specific mood variability and hedonic evaluation of involvement. Utilitarian and hedonic evaluation of involvement leads to positive affect, which supports Hypotheses 3(A) and 3(B).

But significant relationship does not exist between individual specific sensation seeking tendency and hedonic evaluation of involvement that means Hypothesis 2(A) is not supported.

#### **7.3.2 Moderator Relationships –**

1. For high information and high entertainment web sites ([www.rediff.com](http://www.rediff.com))

Hypotheses 4(A) and 5(B) are supported, as there exist positive and significant relationship between individual specific information seeking tendency and utilitarian evaluation of involvement and individual specific mood variability and hedonic

evaluation of involvement. For positive affect, utilitarian evaluation is significant but not hedonic evaluation, which supports Hypothesis 6(A).

But significant relationship does not exist between individual specific focussed attention and utilitarian evaluation of involvement and individual specific sensation seeking tendency and hedonic evaluation of involvement, which does not support Hypotheses 4(B) and 5(A).

2. For high information and low entertainment web sites ([www.indiaonline.com](http://www.indiaonline.com))

Hypothesis 4(A) is supported, as there exist positive and significant relationship between individual specific information seeking tendency and utilitarian evaluation of involvement. But there does not exist relationship between individual specific sensation seeking tendency and hedonic evaluation of involvement, which supports Hypothesis 5(A). For positive affect, utilitarian evaluation is significant but not hedonic evaluation, which supports Hypothesis 6(A).

Significant relationship does not exist between individual specific focussed attention and utilitarian evaluation of involvement, which does not supports Hypothesis 4(B). But significant relationship exists between individual specific mood variability and hedonic evaluation of involvement, which does not support Hypothesis 5(B).

3. For high information and low entertainment web sites ([www.mapsofindia.com](http://www.mapsofindia.com))

Hypotheses 4(A) and 4(B) are supported as utilitarian evaluation of involvement is affected by two factors individual information seeking tendency and individual specific focussed attention. There does not exists positive and significant relationship between individual specific sensation seeking tendency and hedonic evaluation of involvement, which supports Hypothesis 5(A). For positive affect, utilitarian evaluation is significant but not hedonic evaluation, which supports Hypothesis 6(A).

But significant relationship exists between individual specific mood variability and hedonic evaluation of involvement, so it does not support Hypotheses 5(B).

4. For low information and high entertainment web sites ([www.nazara.com](http://www.nazara.com))

Hypothesis 4(A) is supported, as there does not exists positive and significant relationship between individual specific information seeking tendency and utilitarian evaluation of involvement. Hypothesis 5(B) is supported, as there exists positive and significant relationship between individual specific mood variability and hedonic

evaluation of involvement. For positive affect, hedonic evaluation is significant but not utilitarian evaluation, which supports Hypothesis 6(B).

But significant relationship exists between individual specific focussed attention and utilitarian evaluation of involvement, which does not supports Hypothesis 4(B). Significant relationship does not exist between individual specific sensation seeking tendency and hedonic evaluation of involvement, which does not support Hypotheses 5(A).

5. For low information and high entertainment web sites ([www.indiafm.com](http://www.indiafm.com))

Hypothesis 4(B) is supported, as there does not exists positive and significant relationship between individual specific focussed attention and utilitarian evaluation of involvement. Hypothesis 5(B) is supported, as there exists positive and significant relationship between individual specific mood variability and hedonic evaluation of involvement. For positive affect, hedonic evaluation is significant but not utilitarian evaluation, which supports Hypothesis 6(B).

But significant relationship does exist between individual specific information seeking tendency and utilitarian evaluation of involvement, which does not supports Hypothesis 4(A). Significant relationship does not exist between individual specific sensation seeking tendency and hedonic evaluation of involvement, which does not support Hypotheses 5(A).

6. For low information and low entertainment web sites ([www.allindia.com](http://www.allindia.com))

Hypotheses 4(A) and 4(B) are supported, as utilitarian evaluation of involvement is not affected by two factors individual information seeking tendency and individual specific focussed attention. Positive and significant relationship does not exist between individual specific sensation seeking tendency and hedonic evaluation of involvement, which supports Hypothesis 5(A). For positive affect, both utilitarian evaluation and hedonic evaluation are not significant, which supports Hypotheses 6(A) and 6(B).

Significant relationship does exist between individual specific mood variability and hedonic evaluation of involvement, so it does not support Hypothesis 5(B).

## **7.4 Results of Effect of Time on Involvement**

Involvement reflects the inherent need fulfillment, value expression, or interest the consumer has in the product. Involvement is not a one-time construct. Since need, value, interest and appeal are long time measures by definition. Hence, it is necessary to study the effect of time on involvement. It is expected that the involvement of a visitor would be increasing in case of match between site profile and user's profile, and vice-versa.

### **7.4.1 A Person with High on both the Profiles (Information and Entertainment)**

In the case a site of both high information and entertainment profile (e.g. rediff.com), the utilitarian as well as hedonic evaluation of a person (high on information as well as entertainment profile) increases as time passes (refer Figure 7.1). This result is on expected line. The need and value are satisfied so utilitarian evaluation increases and, interest and appeal are satisfied so hedonic evaluation increases.

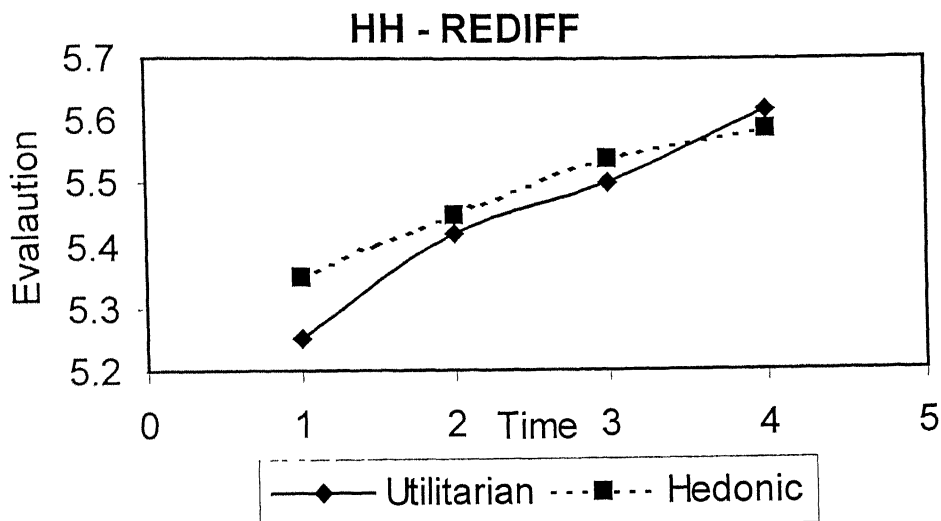
In the case a site of low information but low entertainment profile site (e.g. allindia.com) there is no fixed trend, for neither utilitarian nor hedonic evaluation of the person as the time passes (refer Figure 7.2). Our expectation was that utilitarian and hedonic evaluation will decrease as the time passes. But this did not happen. During few weeks the utilitarian and hedonic evaluation of the person increased, which is surprising.

### **7.4.2 A Person with High on Information but Low on Entertainment Profile**

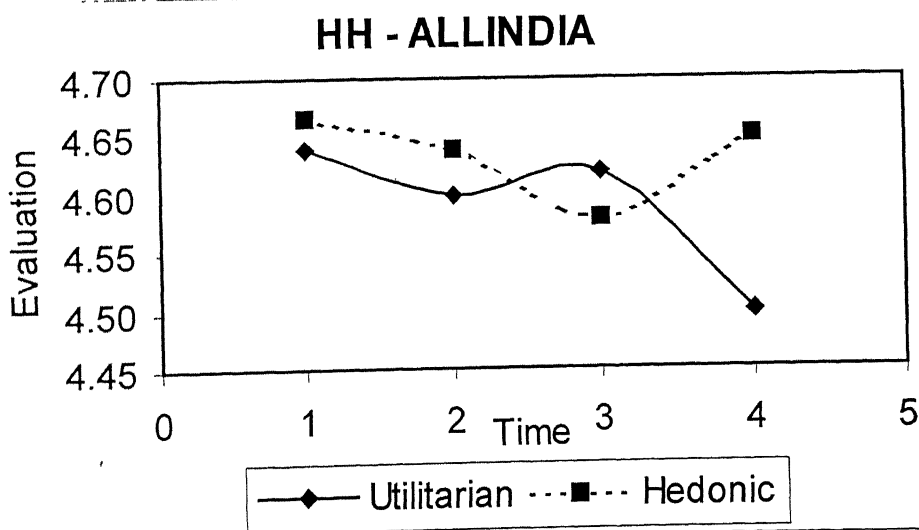
In the case a site of high information but low entertainment profile site (e.g. indiainfoline.com) the utilitarian evaluation of the person (high on information but low on entertainment profile) increases but hedonic evaluation of involvement does not show any trend as the time passes (refer Figure 7.3). The need and value are satisfied so utilitarian evaluation increases.

In the case a site of low information but high entertainment profile site (e.g. nazara.com) there is no fixed trend for neither utilitarian nor hedonic evaluation of the person (high on information but low on entertainment profile) as the time passes refer Figure 7.4). Our expectation was that utilitarian and hedonic evaluation will decrease as the time passes.

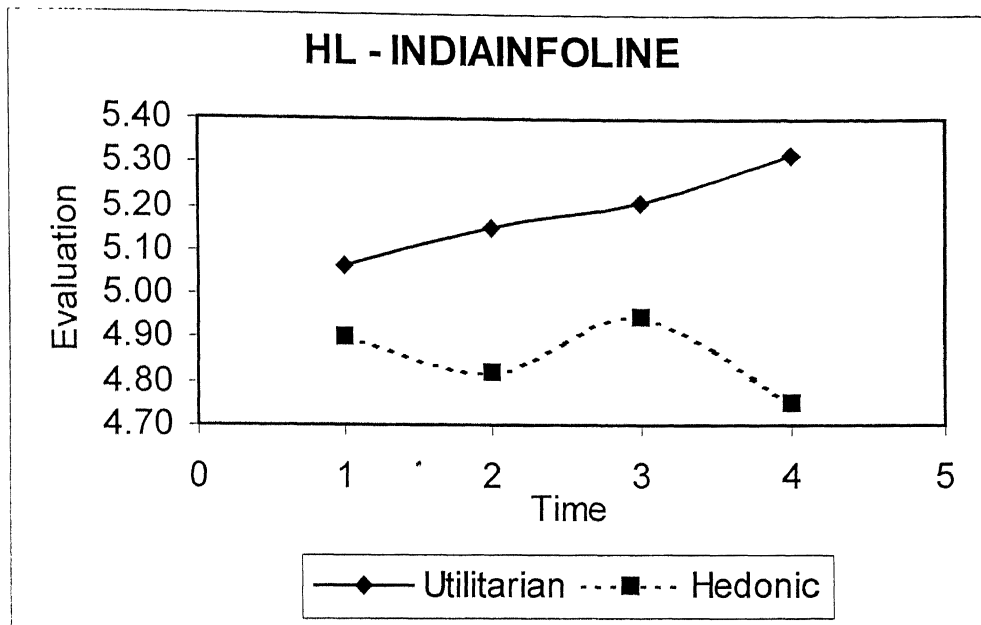
**Figure 7.1: Time-Based Involvement of a High Information – High Entertainment Person Towards High Information – High Entertainment Site (Rediff.com)**



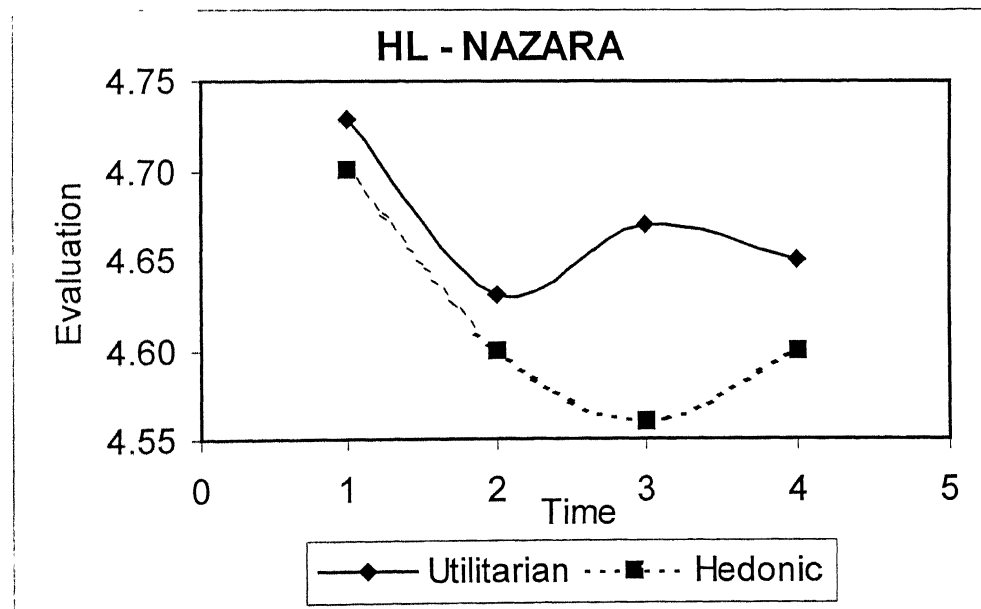
**Figure 7.2: Time-Based Involvement of a High Information – High Entertainment Person Towards Low Information – Low Entertainment Site (Allindia.com)**



**Figure 7.3: Time-Based Involvement of a High Information – Low Entertainment Person Towards High Information – Low Entertainment Site (Indiainfoline.com)**



**Figure 7.4: Time-Based Involvement of a High Information – Low Entertainment Person Towards Low Information – High Entertainment Site (Nazara.com)**



#### **7.4.3 A Person with Low on Information but High on Entertainment Profile**

In the case a site of high information but low entertainment profile site (e.g. [indiainfoonline.com](http://indiainfoonline.com)) the utilitarian evaluation of the person (low on information but high on entertainment profile) decreases but hedonic evaluation of involvement does not shows any trend as the time passes (refer Figure 7.5). Since the person is low on information profile therefore his utilitarian evaluation decreases over time.

In the case a site of low information but high entertainment profile site (e.g. [nazara.com](http://nazara.com)) there is no fixed trend for utilitarian but hedonic evaluation of the person (low on information but high on entertainment profile) increases as the time passes (refer Figure 7.6). Our expectation was that hedonic evaluation would increase as the time passes, which we are getting from the Figure.

#### **7.4.4 A Person with Low on both the Profiles (Information and Entertainment)**

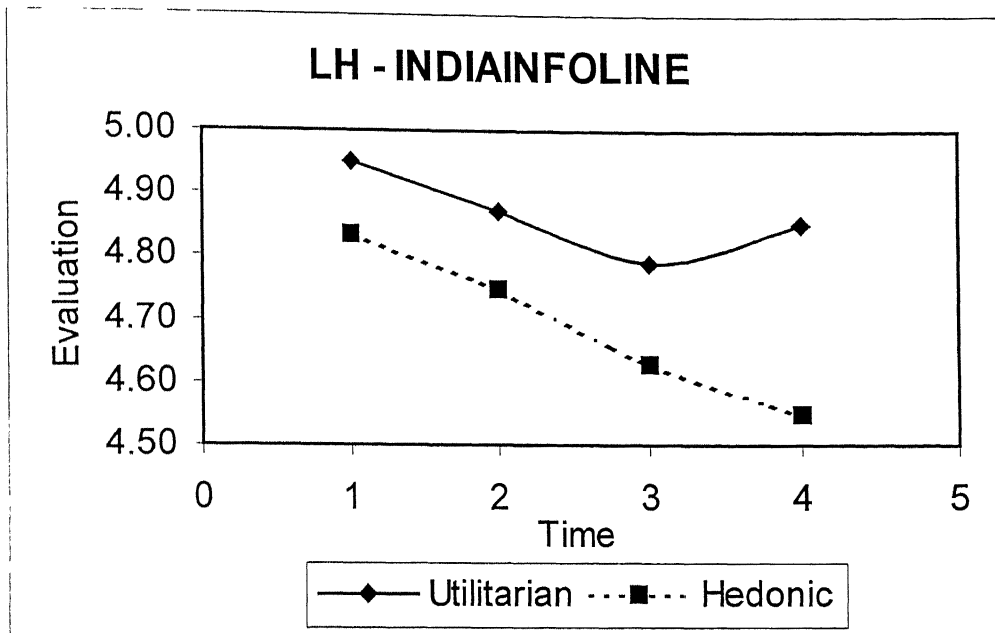
In the case a site of both high information and entertainment profile site (e.g. [rediff.com](http://rediff.com)) the utilitarian evaluation of the person (low on both information and entertainment profile) increases but hedonic evaluation of involvement does not shows any trend as the time passes (refer Figure 7.7).

In the case a site of both low information and low entertainment profile site (e.g. [allindia.com](http://allindia.com)) there is no fixed trend for neither utilitarian nor hedonic evaluation of the person (low on both information and entertainment profile) increases as the time passes (refer Figure 7.8). Our expectation was that both utilitarian and hedonic evaluation would increase as the time passes.

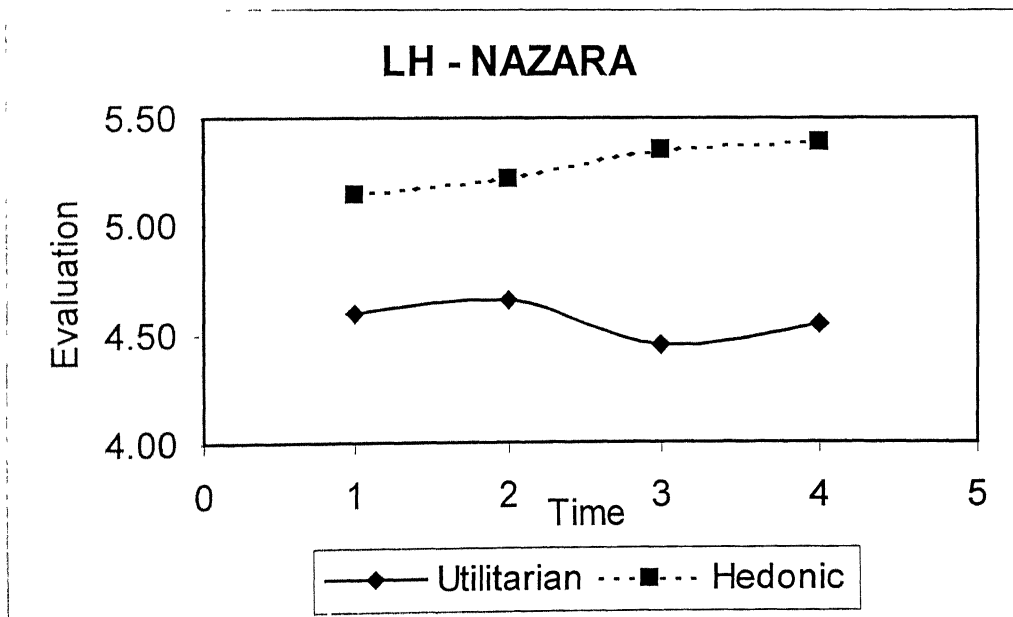
#### **7.4.5 Summary**

In general, one would expect that when individual profile matches site profile, then the involvement parameter (utilitarian or hedonic) should increase over time. From Figure 7.1, 7.3 and 7.6 we find that if there is match between site's profile and individual's profile, the involvement goes on inceasing as the time passes. But from Figure 7.5 we find that if there is mismatch between site's profile and individual's profile, the involvement goes on decreasing as the time passes.

**Figure 7.5: Time-Based Involvement of a Low Information – High Entertainment Person Towards High Information – Low Entertainment Site (Indiainfoline.com)**

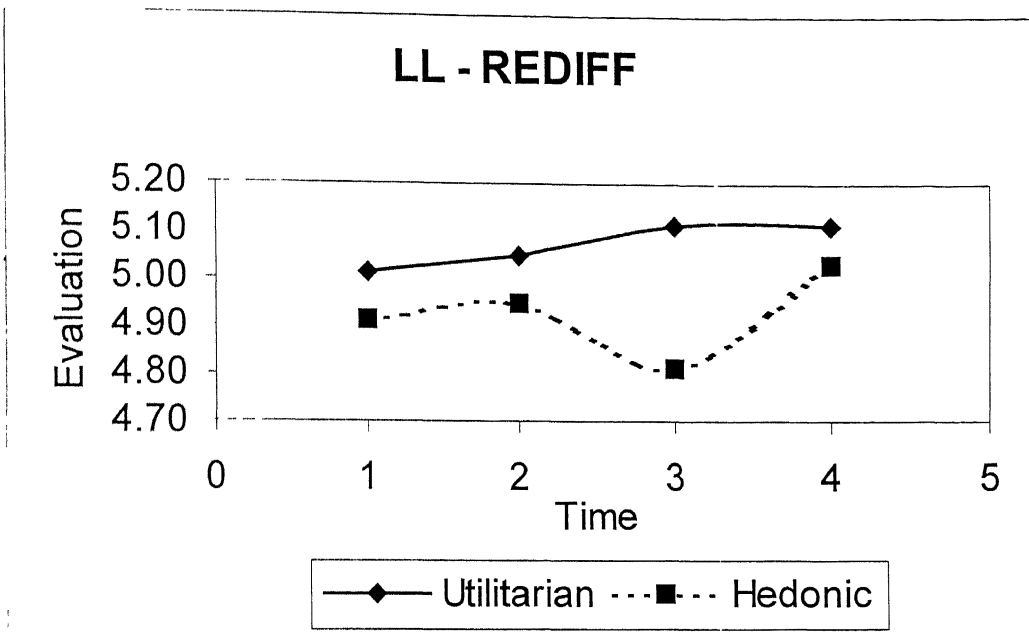


**Figure 7.6: Time-Based Involvement of a Low Information – High Entertainment Person Towards Low Information – High Entertainment Site (Nazara.com)**

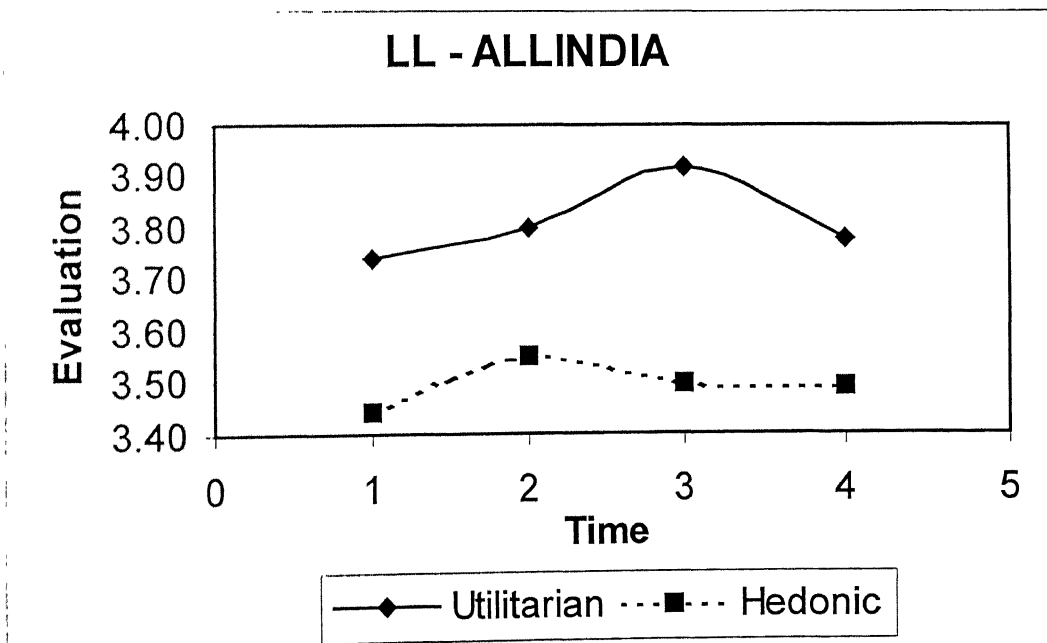




**Figure 7.7: Time-Based Involvement of a Low Information – Low Entertainment Person Towards High Information – High Entertainment Site (Rediff.com)**



**Figure 7.8: Time-Based Involvement of a Low Information – Low Entertainment Person Towards Low Information – Low Entertainment Site (Allindia.com)**



## CHAPTER 8

### DISCUSSION AND MANAGERIAL IMPLICATIONS

Viewed from the perspective of classical marketing problems (e.g., choice and decision making, sales promotion, retail strategy, model of consumer demand, and so on), one may ask about the relevance our model-results have for marketing scientists concerned who are examining these problems in context of Internet. If the Internet represents just another distribution channel, retailing model, or vehicle for advertising, is there something that can be gained by studying the components of customer experience in Internet?

According to Advertising Age (October 1998), “it’s becoming increasingly clear that just about every business must be looking at whether they should be implementing an electronic commerce strategy” (Maddox, 1998b). The question challenging today’s entrepreneur is not whether to have a web site but how to become the winner in Internet competition. The winner are likely to be those that understand what is important to consumers, what factors lead to consumer’s engagement to the web site and monitor how they are performing.

The proposed model has some interesting managerial implications. This model will be particularly useful for the companies aiming to enter the domain of E-marketing. We identified a number of actionable determinants of web site involvement. This will have direct application to design of commercial web sites. The findings reported here indicate that a good web site is one that delivers relevant and well-organised information in an engaging manner. While these results make intuitive sense, many web sites – even sites created by consultants – violate it in one way or the other. The proposed model offers simple and reliable instruments that would help delineate factors for success and failures of different web sites. It allows us to study the impact of varying one or more of the input factors on the predicted involvement level.

Our methodology has the potential to assist in segmentation and targeting decisions for a given web site. If a site has high information providing elements then it must target high information seeking profile visitors. Conversely, for a given segment profile, our methodology can help in editing and “web site design” decisions, by studying the impact of modifying the site’s content (i.e. adding, modifying, or

deleting certain contents) on the involvement level of the target segment. The model's construct can potentially be used in conjunction with technologies to design customized web sites.

The approach has other interesting managerial implications, such as, where to place banner ads (access fraction decision), for how long (time fraction decision), and the geometry of the ads (ad geometry decision).

Since the proposed framework involves stable individual difference factors, the approach can be used to compare the online behaviour of US consumers with the consumers of other nationalities such as Indian, Chinese and European. This will help the web site like *amazon.com*, and *yahoo.com* etc in developing and improving sites, as their businesses are spread all over the world. They can customize their site according to the required level of different constructs in the areas concerned.

The conceptual framework that we have proposed can also be extended to the online education services. Success of online education depends on liking of the web site by the customer. So the online education service providers can match their site's profile according to the consumer's profile.

The consumer behaviour differences can also be compared for traditional versus electronic media. For example, evidence is emerging that online environment offering full information improves the decision making process for consumers and offer greater benefits to online retailers than environments with less information. Though providing full information to consumers may increase the possibility of price competition, providing a compelling online experience may significantly mitigate price sensitivity in such environments.

Understanding differences in people's behaviour will aid the development, design, and evaluation of commercial web sites, online retail stores, search engines, and other information products and services. It is expected that the culmination of the proposed framework in a quantitative model of online consumer behaviour will help generate a priori predictions about the effectiveness of different web site designs and promotional strategies.

## **CHAPTER 9**

### **CONCLUSIONS, LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

The importance of the commerce conducted over the Internet to the global economy is no longer in doubt (Henery et al. 1999). Determining how to create commercial online environments that engage consumers so that important marketing objectives, such as extended visit durations, repeat visits, and online purchase objectives may be achieved, are critical marketing tasks. We believe that modeling the relationship among the components of the online customer experience represents an important first step on this path.

It is obvious that marketing is changing rapidly. Suprisingly, while the overall number of consumers participating in the market has been growing at astronomical rates, there are no radical changes in web based consumer behaviour. The bigger shifts have been taken across merchants, not consumers. While which merchants are “winning” and which are “losing” is in constant flux. The winners are more likely to be those that understand what it is important to E-commerce customers, deliver at a level that the customer wants on the important dimensions, and monitor how well they are performing.

Thus, the question remains what is it that draws consumers to a site. This question has been addressed in this thesis. The findings of our surveys draw important insights into the consumer behaviour. For a site to be successful it must not just attract customers, but also be able to retain customers. While there have been several measures addressed in this thesis, this will remain the paramount concern and continue to require additional research in this area.

In this thesis, we developed a conceptual framework for the evaluation of web site on information and entertainment properties, and applied the individual profile to explain the differences in the involvement of the consumer. The basic contribution of this line of research is to conceptualise the factors that lead a consumer to visit a web site more frequently and to illustrate how the individual difference in web site involvement can be explained and measured in terms of the different constructs. By formalizing and applying the conceptual framework in the context of a web site

involvement, we demonstrated the usefulness of our methodology to predict individual differences in involvement of a web site.

The finding reported here indicates that a good web site is one that delivers relevant and well-organised information in an engaging manner. While these results make intuitive sense, many web sites – even sites created by consultants – violate it in one way or the other. The proposed model offers simple and reliable instruments that would help delineate factors for success and failures of different web sites. It allows us to study the impact of varying one or more of the input factors on the predicted involvement level

### **9.1 Limitations:**

The followings are the limitations of our study:

The survey was restricted to campus residents of IIT Kanpur. The respondents tended to be younger, better educated, and more informed than the Internet population of India as a whole. It might be that younger, better educated and more informed individuals have greater ability to use and develop affect towards a web site; and therefore, that their responses would understate the true evaluation of web site for all consumer. On the other hand, it is plausible that these individuals also would have higher expectations in regards to information and the market strategies of the web sites, and thus be more sensitive to market web sites.

Another limitation was the number of responses that we have for surveys. We had performed 3 surveys in two phases. We got 91 respondents for Survey 1, 40 for Survey 2 and 14 for Survey 3. If we could able to find more respondents we will have better representation of population and we will have our results more refine.

Though there are many popular non-Indian sites but we excluded them in our survey. We restricted ourselves to Indian sites only.

### **9.2 Directions for Future Research:**

Our modeling framework has some limitations, and needs to be refined and tested extensively before it can become a reliable predictive tool. The limitations are summarized here to provide guidelines for further research. The first set of refinements should deal with measurement issues. In light of the fact that individual difference seems to be the crucial determinant of involvement, the *sensation seeking scale* needs to be refined to improve its reliability and validity. A multi-method convergent assessment of the validity of the *moodiness parameters*, which perhaps

involvement, the first aspect of the measurement procedure, could also be

employed in future work. In present framework, we have included only information and entertainment profiles of an individual. Some other personality or demographic characteristics have not included like skill, web usage and playfulness etc. One important research direction would be to extend this framework to include these characteristics.

Further research on the web site involvement model could also address some more fundamental modeling issues. Undoubtedly, we have omitted several important variables in the interest of parsimony and tractability. In particular, the consumer satisfaction literature (Oliver 1980) suggests that prior expectation to enjoyment, based on advertising and word-of-mouth could play a role in determining actual enjoyment. If expectations are too high, the evaluation of involvement of the web site may be tempered by the unrealistic expectations.

Another important research direction would be to relate the individual-level involvement predictions to the word-of-mouth process, since word-of-mouth is an important influence in choice decisions, particularly for experiential products. We did not address the issue of predicting the selection of web site decision in our model. However, the choice and involvement are linked via the word-of-mouth process, and together determine the success of the web site.

Our model is essentially a static model, in which we took individual constructs as stable over time; although some construct may change during the consumption experience. For example, the emotional content of a hedonic consumption experience varies from moment to moment during the experience. Therefore, another research direction would be that to extend this framework to take the account of dynamic nature of the emotional contents.

While this study has demonstrated the importance of the involvement construct in studying satisfaction processes for web sites, much additional work is needed. This model does not address the involvement of a consumer if a purchase is being made from a web site. Another future research direction would be that to extend the model for measuring the customer's involvement for those, who purchased from the web sites.

Thus, there are many steps to be taken before the conceptual framework outlined in this thesis can be converted into a robust and comprehensive methodology for predicting the individual differences in the involvement of a consumer. However, this thesis represents an initial stepping stone in the intended direction.

## APPENDIX 1: SCALES USED IN DIFFERENT SURVEYS

Scale	Variable name	Scale Items
<b>Information Seeking Tendency</b> ( <i>exploratory behavior of Novak Hoffman Yung 2000</i> )	IST1	Even though there are thousands of different sources of information, I tend to use the same type of sources. (R)
	IST2	When I hear about a new information/news, I am eager to check it out.
	IST3	Searching various sources of information is a waste of time. (R)
	IST4	I like to search for and find out about the latest sources of information.
	IST5	I value new information a lot.
	IST6	I try to update my knowledge from various media.
<b>Individual specific focussed attention</b> (Novak Hoffman Yung 2000)	FA1	When visiting a web site, I am not absorbed intently (R)
	FA2	When visiting a web site, I am deeply engrossed.
	FA3	When visiting a web site, my attention is focused.
	FA4	When visiting a web site, I do not concentrate fully (R)
<b>Informativeness</b> (Chen Wells 1999)	IT1	Informative
	IT2	Intelligent Content
	IT3	Knowledgeable
	IT4	Resourceful
	IT5	Up-to-date

<b>Organisation of Information Elements</b> (Ease of Search/Ease of Navigation/Flow) (Novak Hoffman Yung 2000 + Chen Wells 199)	O1	When I use the web site there is very little waiting time between my actions and the computer's response.
	O2	Interacting with the web site is slow and tedious. (R)
	O3	Pages on the web site I visit usually load quickly.
	O4	I find this web site not messy to use.
	O5	I find this web site cumbersome to use.(R)
	O6	I find this web site not confusing to use.
	O7	I find this web site irritating to use.(R)
<b>Utilitarian Evaluation of Involvement</b>		
<b>Need</b> (Mano Oliver 1993)	N1	Vital/Superfluous
	N2	Needed/Not Needed
	N3	Essential/Nonessential
	N4	Fundamental/Trivial
	N5	Beneficial/Not Beneficial
	N6	Useful/Useless
<b>Value</b> (Mano Oliver 1993)	V1	Important/Unimportant
	V2	Means a lot to me/Means nothing to me
	V3	Relevant/Irrelevant
	V4	Valuable/Worthless
	V5	Matters to me/Does not matter
	V6	Of concern to me/Of no concern
	V7	Significant/Insignificant



<b>Sensation Seeking Tendency</b> (would be adaptation of Zuckerman 1979)	SST1	I would like a job that requires a lot of traveling. I would prefer a job in one location.
	SST2	I would prefer living in an ideal society in which everyone is safe, secure, and happy. I would have preferred living exciting settings.
	SST3	I sometimes like to do things that are a little frightening. I avoid activities that are dangerous.
	SST4	I would not like to be hypnotized. I would like to have the experience of being hypnotized.
	SST5	The most important goal of life is to live it to the fullest and experience as much as possible. The most important goal of life is to find peace and Happiness.
	SST6	When I go on vacation, I prefer the comfort of a good room and bed. When I go on vacation, I prefer the frequent change of staying place.
<b>Mood Variability</b> (Underwood and Froming 1980)	MV1	I may change from being happy to sad and back again several time in a single week.
	MV2	Compared to my friends, I am less up and down in my mood states. (R)
	MV3	Sometimes my mood swings back and forth very rapidly.
	MV4	My moods are quite consistent; they almost never vary.(R)
	MV5	I am not as moody as most people I know.(R)
<b>Entertainment properties</b> (Chen Wells 1999)	EP1	This web site is fun to visit.
	EP2	This web site is not exciting. (R)
	EP3	This web site is cool.
	EP4	This web site is not imaginative. (R)
	EP5	This web site is flashy.

<b>Organisation of Entertainment Elements</b> (Reibstein 1999)	OE1	This web site has animation elements.
	OE2	The use of colors in this web site is not good. (R)
	OE3	This web site has enough graphics/pictures.
<b>Hedonic Evaluation of Involvement</b>		
<b>Interest</b> (Mano Oliver 1993)	I1	Exciting/Unexciting
	I2	Interesting/Boring
	I3	Fascinating/Ordinary
<b>Appeal</b> (Mano Oliver 1993)	A1	Appealing/Unappealing
	A2	Desirable/Undesirable
<b>Affect</b> (Novak, Hoffman Yung 2000)	PA1	After visiting the web site I feel unhappy. ( R)
	PA2	After visiting the web site I feel pleased.
	PA3	After visiting the web site I feel dissatisfied. ( R)
	PA4	After visiting the web site I feel contented.

## APPENDIX 2: TOP 50 SITES FROM *BESTINDIANSITES.COM*

**Table A2: “Top 50 Web Sites” during July 1999 – December 1999 from**

*BestofIndianSites.com*

SL No	Site Name	Type	Date of Birth	Sum*	Percent age
1	www.rediff.com	Portal	2/8/97	20	100.00
2	www.nic.in	Hosting	N/A	20	100.00
3	www.mapsofindia.com	Vortal/Maps	14/09/98	20	100.00
4	www.allindia.com	News	12/3/97	18	90.00
5	www.123india.com	Search/Portal	22/10/96	20	100.00
6	www.vsnl.net.in	ISP	29/12/99	19	95.00
7	www.indiainfo.com	Portal	28/02/95	19	95.00
8	www.indiamart.com	B2B+Hosting	3/8/96	20	100.00
9	www.indiaexpress.com	News	27/04/96	19	95.00
10	www.expressindia.com	Portal	13/11/96	20	100.00
11	www.timesofindia.com	News	8/4/96	20	100.00
12	www.kamat.com	Portal	17/07/97	18	90.00
13	www.indiatimes.com	Portal	22/12/96	20	100.00
14	www.indolink.com	Portal	30/05/95	18	90.00
15	www.economictimes.com	News	12/4/96	20	100.00
16	www.chennaionline.com	Portal	14/08/97	20	100.00
17	www.india-today.com	News	24/12/96	20	100.00
18	www.bawarchi.com	Vortal/Recipe	31/05/97	20	100.00
19	www.tamil.net	Portal	3/2/96	18	90.00
20	www.internetindia.com	Portal	25/11/95	18	90.00
21	www.webindia.com	Portal	12/6/94	20	100.00
22	www.naukri.com	Vortal/Jobs	27/03/97	20	100.00
23	www.khel.com	Vortal/Sports	5/4/97	19	95.00
24	www.sify.com	Portal	6/10/98	10	50.00
25	www.smashits.com	Vortal/Music	4/3/99	18	90.00
26	www.dgreetings.com	Vortal/Greetings	13/09/99	20	100.00
27	www.indiaserver.com	News/Portal	20/07/95	20	100.00
28	www.indya.com	Portal	9/9/99	15	75.00
29	www.go4i.com	Portal	12/4/98	14	70.00
30	www.samachar.com	News	31/05/97	20	100.00
31	www.itihaas.com	Vortal/History	31/03/97	20	100.00
32	www.the-hindu.com	News	1/3/96	20	100.00
33	www.theholidayspot.com	Vortal/Greetings	5/8/99	16	80.00
34	www.hindustantimes.com	News	14/08/96	20	100.00
35	www.khoj.com	Search Engine	24/02/97	13	65.00
36	www.bollywoodworld.com	Vortal/Entertainment	15/07/98	3	15.00
37	www.artindia.net	Vortal/Dance	21/09/98	9	45.00
38	www.indiainfoline.com	Vortal/Finance	21/12/98	14	70.00
39	www.mantraonline.com	ISP	13/02/99	3	15.00
40	www.pugmarks.com	Hosting	15/05/96	20	100.00
41	www.careerindia.com	Vortal/Jobs	1/10/97	18	90.00

42	www.ciol.com	Portal	9/9/93	19	95.00
43	www.equitymaster.com	Vortal/Finance	10/11/97	17	85.00
44	www.indiaconnect.com	Hosting	29/12/99	16	80.00
45	www.chooseindia.com	Portal	19/05/97	17	85.00
46	www.dhan.com	Vortal/Finance	27/05/97	8	40.00
47	www.indiafm.com	Vortal/Music	15/06/98	18	90.00
48	www.fashionindia.net	Vortal/Fashion	9/6/97	17	85.00
49	www.indianfilm.net	Vortal/Entertainment	15/07/98	2	10.00
50	www.timesjobsand Careers.com	Vortal/Jobs	14/08/98	7	35.00
51	www.indiagov.org	Government	25/05/96	19	95.00
52	www.outlookindia.com	Magazine	15/08/96	5	25.00
53	www.sulekha.com	Portal	25/02/98	17	85.00
54	www.bseindia.com	Vortal/Stocks	2/1/97	14	70.00
55	www.egurucool.com	Vortal/Education	13/10/99	2	10.00
56	www.bollywoodnet.net	Vortal/Entertainment			
57	www.accessworldwide.com	Vortal/Travel	6/12/96	12	60.00
58	www.appuonline.com	Vortal/Search	16/09/99	13	65.00
59	www.nazara.com	Vortal/Entertainment	14/09/99	9	45.00
61	www.indiatravelog.com	Vortal/Travel	7/5/98	6	30.00
62	www.indiaa2z.com	Search Engine	15/12/98	2	10.00
63	www.destinationindia.com	Vortal/Travel	25/12/96	1	5.00
64	www.indiadirect.com	Portal	23/07/96	7	35.00
65	www.indiacity.com	Vortal/Travel	1/5/97	6	30.00
66	www.eci.gov.in	Election	NA	6	30.00
67	www.satyamonline.com	Portal	6/10/98	8	40.00
68	www.criclive.com	Vortal/Sport	19/04/1999	1	5.00
69	www.welcometoindia.com	Vortal	13/05/97	1	5.00
70	www.homeindia.com	Portal	30/08/96	2	10.00
71	www.nse-india.com	Vortal/Share	20/12/97	1	5.00
72	www.recruitmentindia.com	Vortal/Jobs	16/04/00	1	5.00
73	www.rbi.org.in	Bank	N/A	2	10.00
74	www.timepass.com	Vortal/Fun	2011/97	2	10.00
75	www.pyara.com	Vortal/Bollywood	5/3/99	2	10.00
76	www.chaitime.com	Portal	9/7/98	2	10.00
77	www.mtnl.net.in	ISP	N/A	2	10.00
78	www.club.greetings.com	Greetings	14/03/99	1	5.00
79	www.zeenext.com	Portal	10/7/98	1	5.00

\* Number of times appeared in "top 50 Indian Sites" during six months period (July 1999 – December 1999).

# APPENDIX 3: WEB SITES HAVING CUT-OFF GREATER THAN 70%

**Table A3: Web Sites having Cut-Off Greater Than 70%**

SL No	Site Name	Type	Date of Birth	Sum	Percent age
1	www.rediff.com	Portal	2/8/97	20	100.00
2	www.nic.in	Hosting	N/A	20	100.00
3	www.mapsofindia.com	Vortal/Maps	14/09/98	20	100.00
4	www.allindia.com	News	12/3/97	18	90.00
5	www.123india.com	Search/Portal	22/10/96	20	100.00
6	www.vsnl.net.in	ISP	29/12/99	19	95.00
7	www.indiainfo.com	Portal	28/02/95	19	95.00
8	www.indiamart.com	B2B+Hosting	3/8/96	20	100.00
9	www.indiaexpress.com	News	27/04/96	19	95.00
10	www.expressindia.com	Portal	13/11/96	20	100.00
11	www.timesofindia.com	News	8/4/96	20	100.00
12	www.kamat.com	Portal	17/07/97	18	90.00
13	www.indiatimes.com	Portal	22/12/96	20	100.00
14	www.indolink.com	Portal	30/05/95	18	90.00
15	www.economicstimes.com	News	12/4/96	20	100.00
16	www.chennaionline.com	Portal	14/08/97	20	100.00
17	www.india-today.com	News	24/12/96	20	100.00
18	www.bawarchi.com	Vortal/Recipe	31/05/97	20	100.00
19	www.tamil.net	Portal	3/2/96	18	90.00
20	www.internetindia.com	Portal	25/11/95	18	90.00
21	www.webindia.com	Portal	12/6/94	20	100.00
22	www.naukri.com	Vortal/Jobs	27/03/97	20	100.00
23	www.khel.com	Vortal/Sports	5/4/97	19	95.00
24	www.smashits.com	Vortal/Music	4/3/99	18	90.00
25	www.dgreetings.com	Vortal/Greetings	13/09/99	20	100.00
26	www.indiaserver.com	News/Portal	20/07/95	20	100.00
27	www.indya.com	Portal	9/9/99	15	75.00
28	www.samachar.com	News	31/05/97	20	100.00
29	www.itihaas.com	Vortal/History	31/03/97	20	100.00
30	www.the-hindu.com	News	1/3/96	20	100.00
31	www.theholidayspot.com	Vortal/Greetings	5/8/99	16	80.00
32	www.hindustantimes.com	News	14/08/96	20	100.00
33	www.indiainfoline.com	Vortal/Finance	21/12/98	14	70.00
34	www.pugmarks.com	Hosting	15/05/96	20	100.00
35	www.careerindia.com	Vortal/Jobs	1/10/97	18	90.00
36	www.ciol.com	Portal	9/9/93	19	95.00
37	www.equitymaster.com	Vortal/Finance	10/11/97	17	85.00
38	www.indiaconnect.com	Hosting	29/12/99	16	80.00
39	www.chooseindia.com	Portal	19/05/97	17	85.00
40	www.indiafm.com	Vortal/Music	15/06/98	18	90.00
41	www.fashionindia.net	Vortal/Fashion	9/6/97	17	85.00
42	www.indiagov.org	Government	25/05/96	19	95.00

43	www.sulekha.com	Portal	25/02/98	17	85.00
44	www.bseindia.com	Vortal/Stocks	2/1/97	14	70.00
45	www.nazara.com	Vortal/Entertainment	14/09/99	9	45.00
46	www.paheli.com	Vortal/Entertainment	N/A	----	----

## APPENDIX 4: QUESTIONNAIRE FOR CLASSIFICATION OF WEB SITES ON THE BASIS OF INFORMATION AND ENTERTAINMENT PROPERTIES

This questionnaire is a part of a survey regarding classification of web sites on the basis of their information and entertainment contents.

Please fill in the following before proceeding to the actual survey.

How much are you aware of the web sites given below? Rate the web sites on a scale from 1 (never visited) to 5 (very frequently visited). Select top three that are most familiar to you. Do not rate a web site if your scaling is below 3.

Name of web site	never visited	occasionally	sometimes	frequently	very frequently
1)	-----	-----	-----	-----	-----
2)	-----	-----	-----	-----	-----
3)	-----	-----	-----	-----	-----
4)	-----	-----	-----	-----	-----
5)	-----	-----	-----	-----	-----

Please respond to each statement by putting an "X" in the column that most closely approximates your level of agreement. For example, if you strongly disagree with the statement, then put an "X" in the strongly disagree column for that statement. You have to respond the questionnaire at your own pace. You can refer to the web site and also move back and forth while filling the questionnaire.

Please do not skip any statements and do not put more than one "X" in response to any statements.

(Name of the web site) _____	strongly disagree	disagree	neutral	agree	strongly agree
<b>Informativeness</b>					
1) This web site is informative.	-----	-----	-----	-----	-----
2) This web site has intelligent content.	-----	-----	-----	-----	-----
3) This web site is not knowledgeable.	-----	-----	-----	-----	-----
4) This web site is resourceful.	-----	-----	-----	-----	-----
5) This web site is not up-to-date.	-----	-----	-----	-----	-----

### Organisation of information elements

1) When I use this web site there is very little waiting time between my actions and the computer's response.	-----	-----	-----	-----	-----
2) Interacting with this web site is slow and tedious.	-----	-----	-----	-----	-----
3) Pages on this web site usually load quickly	-----	-----	-----	-----	-----

	strongly disagree	disagree	neutral	agree	strongly agree
4) I find this web site not messy to use.	-----	-----	-----	-----	-----
5) I find this web site cumbersome to use.	-----	-----	-----	-----	-----
6) I find this web site not confusing to use.	-----	-----	-----	-----	-----
7) I find this web site irritating to use.	-----	-----	-----	-----	-----

### Entertainment properties

1) This web site is fun to visit.	-----	-----	-----	-----	-----
2) This web site is not exciting.	-----	-----	-----	-----	-----
3) This web site is cool.	-----	-----	-----	-----	-----
4) This web site is not imaginative.	-----	-----	-----	-----	-----
5) This web site is flashy.	-----	-----	-----	-----	-----

### Organisation of entertainment elements

1) This web site has animation elements.	-----	-----	-----	-----	-----
2) The use of colors in this web site is not good.	-----	-----	-----	-----	-----
3) This web site has enough graphics/pictures.	-----	-----	-----	-----	-----

### Something about yourself:

- 1) Educational Qualification:                      2) Sex: M/F                      3) Age:
- 4) On average, how many hours a week do you use Web?  
       (a) 0 to 3            (b) 3 to 7            (c) 7 to 14            (d) 14 to 28            (e) Over 28
- 5) How many hours per week do you use Web for information?  
       (a) 0 to 3            (b) 3 to 7            (c) 7 to 14            (d) 14 to 28            (e) Over 28
- 6) How many hours per week do you use Web for entertainment?  
       (a) 0 to 3            (b) 3 to 7            (c) 7 to 14            (d) 14 to 28            (e) Over 28



## APPENDIX 5: QUESTIONNAIRE FOR INDIVIDUAL'S INFORMATION AND ENTERTAINMENT PROFILES

This questionnaire is a part of a survey regarding evaluation of individual information and entertainment seeking behaviour.

Please respond to each item number by putting an "X" in front of the most appropriate option that suits your personality. You have to respond the questionnaire at your own pace. You can refer back and forth for filling the questionnaire.

### Part (A)

- 1) I would like a job that requires a lot of traveling.  
**I would prefer a job in one location.**
  - 2) I would prefer living in an ideal society in which everyone is safe, secure, and happy.  
I would prefer living in exciting settings.
  - 3) I sometimes like to do things that are a little frightening.  
I avoid activities that are dangerous.
  - 4) I would not like to be hypnotized.  
I would like to have the experience of being hypnotized.
  - 5) The most important goal of life is to live it to the fullest and experience as much as possible.  
The most important goal of life is to find peace and happiness.
  - 7) When I go on vacation, I prefer the comfort of a good room and bed.  
When I go on vacation, I prefer the frequent change of staying place.
- 

Please respond to each statement by putting an "X" in the column that most closely approximates your level of agreement. For example, if you STRONGLY DISAGREE with the statement, then put an "X" in the STRONGLY DISAGREE column for that statement.

Please DO NOT skip any statements and DO NOT put more than one "X" in response to any statement.

### Part (B)

- |   | strongly<br>disagree | disagree | neutral | agree | strongly<br>agree |
|---|----------------------|----------|---------|-------|-------------------|
| 1) I may change from being happy to sad and back again several time in a single week. | -----                | -----    | -----   | ----- | -----             |
| 2) Compared to my friends, I am less up and down in my mood states.                   | -----                | -----    | -----   | ----- | -----             |

	strongly disagree	disagree	neutral	agree	strongly agree
3) Sometimes my mood swings back and forth very rapidly.	-----	-----	-----	-----	-----
4) My moods are quite consistent; they almost never vary.	-----	-----	-----	-----	-----
5) I am not as moody as most people I know.	-----	-----	-----	-----	-----

### Part (C)

1) I explore using unfamiliar sources of information just for the sake of variety.	-----	-----	-----	-----	-----
2) Even though there are thousands of different sources of information, I tend to use the same type of sources.	-----	-----	-----	-----	-----
3) When I hear about a new piece of information, I am eager to check it out.	-----	-----	-----	-----	-----
4) Searching various sources of information is a waste of time.	-----	-----	-----	-----	-----
5) I like to search for and find out about the latest sources of information.	-----	-----	-----	-----	-----
6) I value new information a lot.	-----	-----	-----	-----	-----
7) I try to update my knowledge from various media.	-----	-----	-----	-----	-----

### Part (D)

1) When visiting a web site, I am not absorbed intently.	-----	-----	-----	-----	-----
2) When visiting a web site, I am deeply engrossed.	-----	-----	-----	-----	-----
3) When visiting a web site, my attention is focused.	-----	-----	-----	-----	-----
4) When visiting a web site, I do not concentrate fully.	-----	-----	-----	-----	-----

Something about yourself:  
Educational Qualification:  
Sex: M/F

Age:  
Name:

This questionnaire is a part of a survey regarding involvement and affect visitors have towards a web site.

How much are you aware of the web sites given below? Rate the web sites on a scale from 1 (never visited) to 5 (very frequently visited). Select top three that are most familiar to you. Do not rate a web site if your scaling is below 3.

**Name of the web site:**

**Instructions:** If you feel that the above web site is very closely related to one end of the scale, you should place your check mark as follows:

Unimportant : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ :  $\times$  : Important

Uninterested : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ × \_\_\_\_ : \_\_\_\_ : Interested

Judge independently for each item. Work at fairly high speed through this questionnaire. Do not worry or puzzle over individual items. It is your first impressions, the immediate feelings about the items that we are looking for. On the other hand, please do not be careless, because we want your true impressions.

trivial : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : fundamental

beneficial : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : not beneficial

useless : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : useful

unimportant : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : important

means a lot to me : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : means nothing to me

irrelevant : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : relevant

valuable : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : worthless

matters to me : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : does not matter

of no concern : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : of concern to me

significant : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : insignificant

unexciting : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : exciting

interesting : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : boring

ordinary : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : fascinating

appealing : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : unappealing

undesirable : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : desirable

---

**Part (B)**

	strongly disagree	disagree	neutral	agree	strongly agree
1) After visiting the web site I feel unhappy.	-----	-----	-----	-----	-----
2) After visiting the web site I feel pleased.	-----	-----	-----	-----	-----
3) After visiting the web site I feel dissatisfied.	-----	-----	-----	-----	-----
4) After visiting the web site I feel contented.	-----	-----	-----	-----	-----

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